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EDITORIAL—SOME HIGHLIGHTS

I. General Economic Scene

State:

Prices and Distribution: July witnessed in the State a sharp upward movement of food prices. With the lifting of the restrictions on movement of rice from Thanjavur district (See Volume IV last issue page 493), the rice prices rose as of the first half of July in Thanjavur Rs 3.30 to Rs. 3.40 per Madras measure. Madras also saw a rise after an initial decline. In early July, prices fell by 10 to 15 paise per kg. but towards the end of the month rose to around Rs. 3 per kg. There is some supply shortage due to the reduced harvest in Chingleput, North Arcot and South Arcot but there is a lot of speculative holding and hoarding of stocks. In Thanjavur the Government's dehoarding operations, supply of rice at Rs. 2.70 a measure to farm labourer, and co-operation from the trade led to a market price of Rs. 2.90 per measure. In other areas there will have to be similar action until the Kuruvai harvest flows in. From the end of July the Government arranged to distribute 3 kgs. per person at Rs. 2 per kg. for persons earning less than Rs. 300 per month. The scheme covered all urban areas. The State Civil Supplies Corporation also organised the distribution in July of specially refined groundnut oil, Bengal and green grams, chillies, vanaspathi and baby food at reduced prices. The sugar ration was however reduced due to the cut in levy sugar release by the Union Government. The Trade in the State—the Tamil Nadu Varthaga Kazhagam—came forward at the beginning of July with a plan to supply essential goods at cost price. This offer of co-operation needs to be worked out for different areas and different goods and put into operation as part of the State's Fifth Plan aim at providing essential goods at low prices.

Power: In July the 60 per cent power cut (See Vol. IV page 476) was continued and early relief from the heavy cut forecast in Vol. IV page 408 seemed unlikely as the month ended with the storage position in the hydel reservoirs being unsatisfactory. The South West monsoon for the State as a whole was near normal but the catchment areas including Kundah did not receive their share. At the end of the month Mettur had 65 feet against the full level of 125 feet and the other important reservoirs, Lower Bhavani, Papanasam, Periyar and Vaigai recorded low levels with only slight improvement in Pechiparai and Perunchani. During the month, 17 million units were generated a day, 6 million at Ennore (220 MW) and Basin Bridge (45 MW), Neyveli 7 million units (275 MW) with 4 million units from the hydel sources. (For a week Neyveli's total generation dropped from 400 MW to 350 MW due to shortage of furnace oil). The power situation in the State continues to be grim with serious repercussions particularly for its industries. Two small hydel projects received final clearance from the Union Planning Commission during the month. One was the 50 MW Nellithorai hydel project in Coimbatore

district at a cost of Rs. 10.03 crores (See Vol. III page 619), using the tail race releases below the Pillur dam on the Bhavani, a 50 MW generator to be imported and will be commissioned in 1978-79. It is essential that the projects now included in the State's Fifth Plan should be efficiently executed and effectively monitored to avoid further delay. The second project cleared was the 20 MW Servalar (Thambaraparani) hydel scheme also to be financed from the State's resources in the Fifth Plan at a cost of Rs. 6.47 crores (See Vol. IV page 4). On the other hand the Rs. 65 crores Kadambarai pumped storage project (See Vol. III page 619, and Vol. IV page 4) on which work for Rs. 1.25 crores has been executed and an advance of Rs. 1 crore to BHEL for a 400 MW generator placed, has been suspended for a second technical review and opinion. The State Electricity Board is facing a financial crisis due to (a) non-collection of its dues owing to staff shortage and strikes, (b) decline in its revenue due to the power cut, (c) the general credit squeeze ordered by RBI, (d) the increasing operational cost due to the rising cost of coal transport by sea, the price rises of Neyveli and the Kerala power supply and poor management generally. The result is that it is not able to pay interest on its loans and is negotiating with the Banks for re-scheduling its debt repayment and is increasingly relying on the State Government funds. The reorganisation of the Boards agreed upon at the Ministers Conference in July should be of help in bringing some financial order to the Board. Another prospect that should be explored on the financial side is a common power tariff for the Southern grid which would make for economy and rationality in finances.

In regard to the power situation in the country, this year's conference of Ministers of power preceded by the 2 day meeting of the Chairmen of the States Electricity Board was in refreshing contrast to that of the past 2 years' meetings (See Vol. II No. 8 pages 9-10 and Vol. III pages 562-563) in that it concentrated on ensuring operational effectiveness of the Country's power projects rather than planning grandiose targets for the future. The 2 meetings came to important decisions: (a) The problem of mounting arrears that the power Boards face is to be given priority attention. The Tamil Nadu Electricity Boards problems as referred to earlier, showed its dues for 1971-72 of Rs. 8.39 crores being 12.5 per cent of its sales of Rs. 67.14 crores–the highest in the country. For the country, the dues amount to Rs. 144.16 crores with Delhi leading at 65.5 per cent. The early collection of dues is the first action to be taken. (b) Second the Union Government's allocations for power to the States are to be made for specific projects and not as block grants as they were in the Fourth Plan. In fact, one of the reasons for the 50 per cent shortfall in Fourth Plan's power achievement compared to the developing of power generation in the Third Plan from 5.65 million KW to 10.17 million KW and its attaining 14.3 million KW in the 3 annual plans was because till the Fourth Plan, the principle of projects assistance was followed. It is hoped that the Chief Ministers will endorse this sound principle of power being financed through specific project assistance. (c) A third important decision was to separate the organisational structure for generation from that for transmission of power (as also suggested in Vol. III page 773) so that the specialised staff for generation and transmission may be used to their maximum and optimum. (d) The problem of additional resources for the Boards was also frankly discussed. With the general credit squeeze, and the LIC insistence on the commercial viability of

projects, finding funds is not going to be easy. But if these conditions are fulfilled —collection of arrears, reductions of transmission losses and raising of tariff rates, the funds will be found as power has the priority next only to defence in the Plan. The conditions attached are all to ensure that there will be no waste. (e) Fifth, serious decisions have been made to reduce transmission losses. Here the union Minister came out into the open in stating that a good part of the losses, amounting to 35 per cent in Dadra and Nagar Haveli 26.14 per cent in U.P. and 20 per cent in Tamil Nadu are due to pilferage. (See Vol. IV page 409). To stop this, each feeder is to have a meter so that thefts can be detected and stopped. In this State, in addition, surprise inspection squads have been detailed to check pilferage and to see if the LT agricultural and industrial consumers have installed shunt capacitors. In addition there is to be rationalisation of the transmission system and establishing of 11 KV sub-station for every 900 sq. meters. (f) Sixth, it was also agreed that major projects in this Plan would be thermal and priority given to completion of existing projects and monitoring of new projects to see that they were completed on time. (g) A seventh problem faced was the transport problem and the uneven quality of coal supplied. Each thermal station is to receive its coal only from 2 or 3 collieries instead of 10 or 16 as at present. Further the Central Fuel Research Institute at Dhanbad will develop a scheme to test coal quality at the points of despatch and receipt, (h) Eighth, under these conditions it was agreed that there should be a 25 per cent increase in average generation of thermal stations to 6,000 KWH/KW, their availability to 85 per cent and working to a load factor of 90 per cent. (i) Other decisions included the project for setting up of large 1,000 HW thermal stations by the Union Government, the settling of the large outstandings to BHEL making its ways and means position difficult, speeding up the CWPC clearing of projects by personal discussion and the setting up of a technical committee to review the working of State Electricity Boards to improve their performance. If those decisions are acted upon, the power crisis will assume the normal proportions of power shortage in growing economy. For the month of July, the Country as a whole except the north eastern region continued to face acute power shortage. The aggregate power shortage during the month was 22.47 gwh per day, the Northern region suffering half of this total, followed by the Southern. Capacity shortages to meet peak load demands are experienced in Maharashtra. Power shedding was common in the Delhi region, leading to industrial closures in Mayapuri, Najafgarh and Faridabad. In Punjab 60 percent daily cut on industries and 40 per cent on tubewells continued. In West Bengal, power rationing involving a 30 per cent cut was introduced. The jute industry reports a loss of Rs. 65 crores in production this year, including a foreign exchange loss of Rs. 35 crores due to power cuts. The two bright spots are the improvement in the Linganmakki reservoir which enabled Karnataka to reduce the power cut to 40 per cent from mid July, and the plan to use lignite in Gujarat in place of costly and non available coal, including a Rs. 45 crore complex for a thermal cum briquetting plant. Its lignite deposits, estimated at 200 million tonnes can help it in this change over of its fuel base.

Inter State Co-operation: Further to the report in the last issue (Vol. IV page 480) on the inter State review of the Cauvery waters, discussions between Tamil Nadu and Karnataka along with the Union Ministry continued in July. A matter of urgency was the low level of the Mettur

reservoir which as noted earlier stood at 65 feet at the end of July but which with an inflow of 12 tmc from Karnataka whose Krishnaraja sagar water level stood at 115 feet, could have reached 71 feet. Consultations between the two State officials aimed at releasing 12 tmc of water from Karnataka were under way during the month. On the issue of the division of the Cauvery waters, two proposals of the Union Irrigation ministry—one for a cement concrete canal from Mettur to the grand anicut canal in Thanjavur and the other for a dam between the lower anicut and the sea to impound the rain water and bringing it to Mettur have been considered by the State Government and found infeasible—the first because of the enormous cost of constructing a new river and the second because of its engineering problems. Karnataka, Tamil Nadu and the Union ministry are agreed that the annual inflow into Mettur has been 380 tmc ft. Now the discussion is on whether Tamil Nadu would agree to a reduction of 60 tmc feet. The State Government is willing to reduce the inflow by 40 tmc ft. for Karnataka's benefit—which is the capacity of Karnataka's 3 new dams—by modernising the Cauvery delta. The World Bank has examined the modernisation scheme and has offered a credit of Rs. 49 crores for it. The Government has appropriated Rs. 14 crores out of its own funds to develop the Cauvery Channels. Now it is necessary that the Union Government support the World Bank Tamil Nadu project and not quite needlessly slow down the finalisation of the agreement on the canals project with the World Bank.

Railways and Ports: Southern Railways earning for 1973-74 set forth in its report shows a good revenue of Rs. 107.19 crores comprising Rs. 38.44 crores from passengers, Rs. 57.07 crores from goods traffic and Rs. 11.68 crores from other items. While passenger traffic for the quarter April–June 1974 declined, goods earnings were the same as the first quarter of 1973. The doubling of the Erode-Uttukuli track for a length of 37.85 kms (See Vol. IV page 258) has been completed and goods traffic is using it and work on the remaining 46.20 km is in progress with the improvement of the coal position to five days stock in hand and five days stock en route, 60 cancelled passenger trains were restored in mid July, with 300 more cancelled trains to be restored. As a result of the tight and deteriorating resources position of the Railway, which estimates that it faces a deficit of Rs. 220 crores the Rs. 18 crore electrification scheme of the Madras Trivallur and Madras Gudur schemes (See Vol. IV pages 6 and 180) are being deferred by a couple of years. Above Rs. 1 crore has been spent on automatic signalling and considerable infrastructure has been constructed. The deferment should be planned in such a way that this initial investment and the income earning potential of this route are not lost. The Tuticorin harbour declared a major port (See Vol. IV page 411) received its first ship carrying naphtha in mid July. The Rs. 22 crore project which will be completed next year will finance the construction of 4 berths—for salt, coal, cement and general cargo. The mooring berth for handling naphtha and fuel oil has been completed and the first berth will be commissioned later this year. The State's two major ports will aid industrial and infrastructural expansion.

Income tax and SBI reports: The Tamil Nadu circle of the Income Tax department reports that Rs. 104 crores was collected in 1973-74, crossing for the first time the Rs. 100 crores mark. In this area there are 45,000 assessees who are salaried employers. The arrears position is however not good, There were Rs. 60 crores

old arrears of which only Rs. 23 crores have been collected and of Rs. 72 crores new arrears, Rs. 44 crores have been collected. Raids to counter black money holdings and prosecution of tax evaders are on the increase. In this State Rs. 99 crores was realised as income tax, Rs. 4 crores as wealth tax and Rs. 66 lakhs as gift tax. The State Bank of India's report for the State records its net work of 260 branches including 160 rural ones, deposits of Rs. 152 crores and advances of Rs. 175 crores giving a credit-deposit ratio of 115 per cent, assisting 98,428 farmers with Rs. 13 crores, 6,176 small industries and 8,516 small businesses with Rs. 43 crores, exports with Rs. 15 crores, differential interest rates to 10,219 persons with Rs. 0.62 crores, 298 technocrate with Rs. 1.71 crores, 400 transport operators with Rs. 0.65 crores, employment to 26,714 persons with Rs. 5 crores and public and private sector loans of Rs. 108 crores. Its lending to priority sectors amounted to 38 per cent of its total advances.

Housing: The Tamil Nadu Housing Board is engaged in qualitative improvement and quantitative expansion of housing in its schemes. Two projects which are innovative and aimed at economising on scarce materials are the programme to conserve cement and steel and the programme of prefabricated houses. On the first project, instead of full use of cement and fly ash from the Basin Bridge thermal station is used for plastering and floor polishing, saving 20 per cent cement. On roofing, funicular steels developed by SERC are used to save on steel. Hollow clay tiles which have greater thermal insulation and are cheaper than bricks are also used. On the second project, in collaboration with SERC, the Board is constructing 144 middle income prefabricated flats for middle income groups at a total cost of Rs. 30 lakhs and 50 per cent saving in time. Third with a HUDCO loan, it is building 600 low income, 932 middle income group and 160 economically weaker section scheme flats. A new scheme, the Janatha scheme for building 23 houses, each costing Rs. 2,500, in 6 villages has also been launched.

Prohibition: The government has decided to introduce total prohibition in the State from 1st September of this year, which means a reversion to the situation before August 29, 1971 (See Vol. I No. 7 page 1) Under the system, liquor permits will be issued on medical grounds and for tourists. The decision has serious fiscal overtones as the State will be losing Rs.50 crores earned last year in liquor excise revenue. The decision will be presented as a bill to the legislature for its approval in August.

National:

Annual and National Fifth Plan: Work on restructuring the Fifth Plan, reorienting monetary and fiscal policies to restrict investment in and production of unessential and luxury goods and increase the investment resources for the core sector including investment in wage goods production continues. The other major Plan issue is to counter inflation and for this the commission is working on a public distribution net work for distributing food grains, standard cloth, domestic fuels and edible oils, while the credit policies are aimed at meeting the needs of the priority sectors. For the present the draft Fifth Plan and the planning process itself is in cold storage. The major issue facing the Union Planning Commission and the Government is the Annual Plan on which the Plan and non-Plan outlays of the Union and the State governments show a deficit of Rs. 600 crores over and above the budgetted deficit of Rs. 125 crores, and the first reduction of the Annual Plan by

Rs. 200 crores. This deficit is only partly due to additional demands of coal, steel, power and fertilisers as those have been met by the Rs. 200 crores reduction in other sectors. This is due to the recurring D.A. and other non-developmental expenditures which explain in part the forms of action taken by the Union Government in combating inflation and the nature of the supplementary budget, as seen later.

Prices : The Index Number of wholesale prices in June registered a continued rise up to the middle of the month from 299.5 on May 25 to 301.8 on June 1, 303.9 on June 8, 306.0 on June 15, stabilised for June 22 at 306.1 and went upto 307.8 on June 29. The biggest rise during the month was in fuel, light, power, lubricants and coal from 286.8 on May 25 to 312.1 on June 29 followed by food articles from 345.4 to 356.2 on those dates. This means that for April, May and June 1974 wholesale prices were 28 to 30 per cent higher compared to those three months of 1973 - 29.3 per cent higher in April, 29 per cent in May and 28.4 per cent in June. The retail prices of food articles were much higher than reflected in the index of wholesale prices as noted earlier under the State section.

Anti-inflationary measurers : Against the continuous rise in prices reviewed in the Bulletin from Vol. II No. 9, that is July 1972 in every issue and the many suggestions made to counter the inflationary spiral from Vol. III page 699 to the last three issues proposing various monetary and non-monetary measures, July witnessed the first series of government and government sponsored measures to counter inflation. (a) the Companies Ordinance issued on July 6 and amended on July 15 limited for 2 years maximum distributed profits to a 12 percent dividend or 1/3 of net—after tax profits whichever is lower with the excess to be ploughed back into the firms capital resources. Under this, some 329 companies which pay over 12 per cent dividend will be affected, about Rs. 50 crores will be held back, reducing money stock by Rs. 10 crores. The problem here is that many small shareholders will have their income reduced and the increased capital resources will not necessarily flow into the priority sectors of production. (b) The Additional Emoluments Ordinance also issued on July 6 provides for the compulsory deposit of additional wages and salaries for one year and 50 per cent of additional dearness allowances for 2 years, returnable after 1 and 2 years with an interest rate of 10 per cent in five annual instalments. Under this Rs. 450 crores of payments will be immobilised, involving a reduction in money stock by Rs. 95 crores. The problem here is that the real wages of the worker at 100 in 1960-61 is today 99 and the share of the wage element in value added has already fallen from 46 per cent to 39 per cent according to the RBI survey. Also this sum is not being used as investment in the priority sectors but simply immobilised. (c) On July 8 the Union government further restricted the frequency in the issue of bonus shares increasing the time lag of the issues from 18 to 40 months. Here again some distinction should have been made between the sectors. (d) On July 17 the Compulsory Deposit Scheme Ordinance was issued requiring those earning from Rs. 15,000 to Rs. 25,000 per annum to deposit 4 per cent of their aggregate earning, those earning Rs. 25,001 to Rs. 70,000 to deposit 6 per cent and those earning above Rs. 70,000 to deposit 8 per cent all repayable after 2 years in 5 instalments at 8½ per cent interest. This ordinance covers 600,000 income tax payers and will reduce incomes by Rs. 50 crores and money stock by Rs. 10 crores. Here again the non-productive non-use of this resource and the non-coverage of the large numbers of tax evaders and black

money dealers should be noted. In fact there is need for similar action on these two groups. (e) For the present, action to bring the large number of tax evaders and black money operators to book is limited to intensified scrutiny of their status, raids and court proceedings. According to Finance Ministry out of 1,130 doctors in Delhi, only 636 pay income tax, in Bombay out of 12,044 only 7,689, Calcutta out of 7,793 only 3,643 and Madras out of 3,117 only 1,904. As for lawyers, the total and tax payers are 1,496 and 703 in Delhi, 5,382 and 3,831 in Bombay and 2,740 and 393 in Madras. So too is the story with contractors, architects and all self employed. The searches, seizures, raids and legal proceedings are poor weapons against this powerful group. The rural sector is another area outside the tax frame work. The Raj committees AHT must be enforced here. The government announced at the end of the month that there will be no demonetisation, as the black money holders have converted their resources into goods and real estate and small notes and that it does not accept the Semi-Bombla proposal as it will shake the people's confidence in the currency and banks both unconvincing in view of the serious issues at stake. (f) The RBI and the Scheduled banks have also moved on the credit side. The bank rate has been raised to 9 per cent from July 22, interest rates on all deposits were raised including the rise to 10 per cent on five year deposits and that on post office savings 8 to 10 per cent and that on provident fund 7 per cent, credit restraints imposed involving raising minimum rate of advances from 11 to 12.5 per cent, minimum rate of discount from 9.5 to 11 per cent, on selective credit controls from 13 to 15 per cent, on export credit from 9 to 10.5 per cent, the net liquidity ratio of banks to be 40 per cent, with the Reserve Bank charge raised from 15 to 18 per cent. In addition, a scrutiny of the big 50 borrowers by each bank a rise in lending rates by them, a freezing of credit limits at the July 12 level by SBI went into force. These measures were necessary as the RBI review for May showed an increase of Rs. 112 crores of money supply with the public which is the first month of this year's slack season, on top of the Rs. 424 crores rise in April, making the total money supply with the public Rs. 11,294 crores in May and Rs. 11,376 crores in June. During May, the scheduled bank credit increased by Rs. 203 crores and in June by Rs. 153 crores. It is hoped that the measures listed here will call a halt to this credit inflation, though the experience to date is that the banks are treating the higher lending rates as a means of earning more rather than lending less and the pressure on the demand for bank credit has not slackened despite the high rates. There are other leakages. The RBI study shows that on June 30, 1972 overdues in cooperatives amounted to Rs. 319 crores or 36 per cent of loans, most of it due to wilful defaults. To correct this a State Farming Corporation should be set up in each State to buy and sell land and to settle the dues. (g) Also in this package should be put the three government of India loans which opened and closed on July 16, with a subscription of Rs. 440 crores, which after redeeming the loan maturity leaves a net amount of Rs. 238 crores. As pointed out in earlier issues these loans are not strictly anti-inflationary because they are contributed by the RBI and the scheduled banks and not by the public and they do not withdraw money from circulation. (h) On the non monetary side, the government announced in the Lok Sabha that it is importing food grains, and is obtaining a second Soviet wheat loan to feed the public distribution system, is recasting the textile policy to compel the production of standard cloth by the mills and is planning increase of

edible oil and agricultural production generally. These seven measures have a varying impact in combating inflation and should be followed up by further measures to immobilise money supply, particularly black money and to revive industrial and agricultural production. They are however a good starting point.

Supplementary Budget: On July 31, the Union Finance Minister presented a supplementary budget to the Lok Sabha which would raise Rs 232 crores in a full year and Rs. 136 crores for this year, including Rs. 13 crores which will accrue to the states. The main taxes introduced are (a) 7 per cent on bank interest earnings, (b) increased rates on capital gains from 45 to 55 per cent for companies, 10 per cent reduction in the individual's exemption and increase in the rate from 35 to 45 per cent on other assets, (c) increased duties on zinc, cigarettes, tyres, latex, cement, asbestos, iron, electric tubes, caprolactum, rayon and synthetic fibres, cotton yarn, paints and varnishes, plastics, paper, steel ingots and cotton fabrics. The supplementary budget is essentially a revenue raising instrument, to avoid or reduce the heavy deficit facing the government estimated at Rs. 600 crores over and beyond the Rs. 126 crores that have been budgetted due to, according to the finance ministry (a) the export of wheat of 1.8 million tonnes at a cost of Rs. 200 crores plus a freight of Rs. 3,800 per tonne, (b) fertiliser imports of Rs. 450 crores, (both wheat and fertiliser imports will be sold at lower prices involving a budget subsidy). (c) the increased railways deficit beyond the Rs. 52 crores budgeted which this Bulletin computes at over Rs. 200 crores, (d) further DA payments to the staff, and (e) increased project costs of the plan projects due to inflation. The government announced that prices have been rising at the rate of 2.6 per cent per month during April to June 1974, adding up to 7.6 per cent in the first quarter. Despite the claim that the budget is meant to counter the inflation forces in the economy, apart from some indirect effects such as making credit costlier by the tax on bank loans for the mopping up of some capital gains and reducing the mounting deficit, this resource raising budget will actually raise prices in so far it pushes up all production costs, it does not touch the black money sector and the agricultural rural sector on which a renewed appeal is made to the government. There should be a cutback on mounting non development expenditures. The inflation is a double headed phenomenon. The supplementary budget deals in a small way with its monetary cause small, because it does not cover even half of the anticipated deficit. The other side is the starting up of the production machine to increase the aggregate supply of food articles and manufactures. For this we have to await other measures of the government, including a more direct attack on accounted and unaccounted monetary forces.

National Production Front.

Industrial growth: Following last year's industrial stagnation reported in the last issue Vol. IV (page 483) and the record of 0.2 per cent growth in 1973, the January 1974 figures of the industrial index published in July shows a continuing low 0.6 per cent growth compared to January 1973 and is lower by 5.2 per cent compared to December 1973. There is not much time left for industrial revival, as the world growth outlook is sombre. OECD forecasts a cooling off period in the advanced countries, involving a low growth of 0.5 per cent in 1974, inflation at 13 per cent and balance of payment deficits of $ 40 billions. The causes for industrial stagnation in the Country are the decline and stagnation of public and private investment, a sharp rise in manufacturing costs, shortage of

basic raw materials, constant power cuts and shortage of coal and industrial unrest. In this rather gloomy situation, the Union Ministry of heavy industry reports a continuing improvement of public sector heavy industry (See Vol. IV page 346) reaching a 46 per cent growth in production during the first quarter April-June 1974. Total production was Rs. 92 crores compared to Rs. 67 crores during last year's first quarter, with BHEL reporting 115 per cent capacity use, and MAMC fast expanding its production capacity from Rs. 35 crores to the targetted Rs. 240 crores.

Steel: Despite the various obstacles of fluctuating and reduced power, inadequate coal and coke supplies and labour troubles, (See Vol IV page 347 and last issue Vol. IV page 484) the July reports on steel production are encouraging. During the first quarter of the current year, Bhilai produced 3.93 lakh tonnes of ingot steel and 3.56 lakh tonnes of saleable steel, against the targets of 4.35 lakh tonnes and 3.74 lakh tonnes. Rourkela also reports increased June production in all units—17,732 tonnes of ingot over May and 9,589 tonnes of saleable steel. Durgapur reports a loss of 14,306 tonnes of ingot last year but increased finished production, a near doubling of stainless steel ingots and improved quality and very low rejections. TISCO is recovering from its bad year of the low 1.2 million tonnes saleable steel production with its new 54 oven battery working to capacity and progress on its colliery expansion project. The industry faces a number of problems. There is on the one hand a shortage of steel in the Country involving an annual import of Rs. 200 crores of steel, and on the other a growing glut of steel in the stock yards and at the plants due to the slow movement of steel stocks from the plants by the railways, the credit squeeze and the June and July successful raids by the steel controller against non-genuine traders. Hence it is proposed to increase steel exports from last year's Rs. 50 crores to Rs. 100 crores this year, particularly to the growing high price market in West Asia. For this purpose SAIL formed in late June a subsidiary, SAIL International, to handle all exports and imports. A second problem is the end use of steel. Part of the anti-inflation package is to reduce use of steel in non-priority sectors. The committee on economy in steel consumption has recommended stringent restrictions on use of bars and rods for construction of houses, offices, water supply and civil line works, effecting savings by substituting for them high tensile bars which are among 10 items that are to be produced in much larger quantity, the use of welded rails in place of fish plate points and the re-use of rails by the railways together with a rise in prices to cut back on inessential steel consumption. For these important recommendations to be executed, current production must be stepped up, the quality of refractory bricks improved and type and capacity of steel plants increased. The case for a price rise in steel is not only for cutting back on consumption but also to make it internationally comparable —steel plates cost Rs. 3,800 per tonne in Japan and Rs. 1,500 in India (See Vol. III page 630). Third such a price rise will also meet the resources problem of the steel industry which may lose Rs. 75 crores out of its Rs. 162.45 crores from inflation and the current cutting down of plan and non plan expenditures and by the fact that 80 per cent of the funds are pre-empted for Bokaro and Bhilai expansions. A price rise might make up this resource deficiency for the industry. Fourth SAIL needs to concentrate its attention on Bokaro and Bhilai expansions to 4 million tonnes each and remove the coal bottlenecks they face. The Rajhara mines of Bhilai are func-

tioning at 60 per cent capacity and the Barsua mines at Rourkela at 35 per cent. It needs to ensure that the 400 locomotives of 150-1,400 hp needed by the plants are made available to them during this and the next Plan period. It must also take effective action to reduce the inventories at the HSL plants which exceed Rs. 200 crores. Fifth the new distribution policy for steel under which the 890 bulk consumers will receive supplies direct from the plants and the 2,100 remaining consumers from the stockyards, while reducing delay and routines, will call for stepping up the capacity of stock yards and ensuring that deliveries reach them at low cost on time. Finally plans are underway for setting up 2 new integrated steel plants of Maharashtra and MP during the Sixth Plan, on which MECON is preparing techno-economic feasibility reports. This expansion is needed and can profit from past and current experience in our record of steel production.

Crude : The Country's demand and supply situation for crude continues to be difficult. Against last year's 24.42 million tonnes availability (13.39 million tonnes of imported crude, 3.87 million tonnes of imported petroleum products and 7.2 million tonnes of indigenous crude), this year's estimated availability is 22.6 million tonnes (12 million tonnes imported crude, 3.1 million tonnes of imported petroleum products and 7 million tonnes of indigenous crude because of the decline in Ankleshwar production). This gap of 1.8 million tonnes between last year and this year must be met by substituting other forms of fuel for crude and an increase in indigenous production—not by increasing the high Rs. 1,118 crores allocation for import. Tamil Nadu has set up a committee to assist small scale industries to change over from furnace oil to coal. For this, coal supplies should be assured and the special equipment costing Rs. 5 lakhs for the change-over made available to them. The Kanpur Technological Institute reports that its Rs. 1.25 lakhs coal gassification plant has successfully processed coal into gas and within six months the product will be available for commercial use. As noted earlier, the major industries in Saurashtra—chemicals, cement, batteries and tiles are switching over from coal and furnace oil to lignite which is abundantly available locally. This, plus the proposed thermal station will ensure that Kutch lignite will solve Gujarat's fuel crisis. Tamil Nadu can well follow suit with its larger lignite supplies than Gujarat. The Oil Prices Committee is at work at pricing crude and petroleum products in light of further developments (Venezuela has increased its price from \$ 14.08 to \$ 14.43 per barrel in early July) and the agricultural and industrial demands of the future. In the meanwhile, refineries have been asked to reduce their throughput of kerosene, as they have of petroleum, and increase the production of HSD. The problem of the profitability of the refineries being affected by this change in production pattern can be met by increasing the price of HSD and kerosene, which is under consideration. Pending the Committee's recommendation expected in March 1975 on uniform prices for imported and indigenous crude and petroleum products, the government has increased the price paid to indigenous crude from \$ 3.58 to 4.58 per barrel. In addition, it has imposed a cess of Rs. 60 per tonne on indigenous crude, which will yield Rs. 29.4 crores this year and Rs. 68.52 crores in 1978-79 to finance an Oil Industry Development Board to aid in oil exploration. The government is also negotiating the takeover of Burmah Shell and Caltex along lines of the ESSO take over (74 per cent equity ownership See Vol. IV page 188), in order to ensure full exploitation of refinery capacity along production patterns suited to our needs.

The loss here is that as pointed out in Vol. IV page 187 the government to government crude imports are nearly 50 per cent more costly than the foreign companies' import prices. Caltex has asked for a further rise over that reported in the last issue to $ 9.75 per barrel from July which is the same as that granted Burmah Shell. In inaugurating the Hindustan Petroleum Corporation in mid July 1, the Union Minister reminded the Country of the problem we face in this area. For the three years ending 1972-73, the crude import bill for 38 million tonnes was Rs. 525 crores, in 1973-74, 13 million tonnes of imports cost Rs. 580 crores. This year about the same amount will cost Rs. 1,200 crores. While the HPC will operate to full capacity of 2.75 million tonnes per year, the other refineries might not be able to, because of reduced imports. We will have to adjust our economy to pay this rental charge of the oil producers, but we should do it by increasing our crude production and rapidly switching over from oil to coal, lignite and gas.

Coal : June recorded improved loading and movement of coal from 7,300 wagons per day to 8,000 wagons. The improvements in coal loading were in Bengal-Bihar coal fields and the Central India fields. With improved offers of coal in Pench, Chanda and Singareni the loadings will increase to 8,400 wagons per day. The development of Singareni is vital for Tamil Nadu and the Southern States. The Fifth Plan target to increase its raisings from the present 5.5 million tonnes to 12 million tonnes calls for opening new mines in Mangur and Adilabad, requiring building of roads and railway sidings and new machinery. The 2 decades past record of coal output and transport by the railways is impressive. The railway haulage doubled in the sixties with the perennial short supply of wagons problem in the January-June busy season unsolved. Our coal reserves are 80,952 million tonnes of which 21,365 million tonnes—are proven reserves, but only 1,810 million tonnes of class one grade. Coal raisings have increased from 35 million tonnes in 1951 to 75.4 million tonnes in 1974, with 20 per cent consumed by the railways (down from 33⅓ per cent), 11 per cent by iron plants and 18 per cent by steel industries and 20 per cent by thermal stations. Other large consumers are jute and cotton mills, engineering units, paper mills and cement factories. For the future, coal will be the major fuel and energy base of the Country. The National Coal Development Corporation reports three successful technologies which will increase and improve our coal and coal raisings—the manufacture of formed coke being successfully carried out at Talcher coal field, application of caving method of mining at Gidi in Bihar with French collaboration, and the mining crushed stone with sand for stowing purposes at Karanpura coal fields. Its programme to develop and expand new existing mines in Bihar, Orissa and MP is already yielding results—19 million tonnes for the year against 15.54 million tonnes last year. The government is planning to nationalise some 100 coal mines which were left out 2 years ago. It is essential that the management of these nationalised mines should be on a par with the stakes of the Country in coal supply.

Cars and tyres : The government announced an increase in prices of passenger cars from July 1 ranging from Rs. 3,500 to Rs. 4,000. The Ambassador's has been increased from Rs. 18,300 to Rs. 22,777. Premier from Rs. 17,980 to Rs. 21,610 and Gazel from Rs. 17,480 to Rs. 21,738. These increases not only follow the Supreme Court decisions but are also means of cutting back on demand. Tyre manufacturers, who since April 29 are not under any control, raised their prices for the second time on June 28 (See Vol. IV

page 354) from Rs. 10 for a scooter tyre to Rs. 175 for a truck tyre. The tyre industry has a seller's market and this increase is over the 18–52 per cent April rise. If this price rise cuts back on the black market it would be a small price to pay, but that seems doubtful.

Jute : Also on July 4 the government announced a statutory minimnm of Rs. 125 per quintal for raw jute, along with various other measures on the part of the Jute Corporation to help the jute growers obtain prices higher than the statutory minimum. JCI will be purchasing 12 lakh bales of raw jute and building a buffer stock of 5–10 lakh tonnes for this year. The extent to which this will be attained will depend on JCI's purchasing machinery, the functioning of the wider co-operative uet work and the availability of credit from RBI and the banks.

Washing soap and edible oils: With the acute shortage of soaps, the Union government is increasing the production of synthetic detergents and sanctioning additional capacities for State government units in West Bengal, Bihar, Orissa Tamil Nadu, Karnataka, Andhra Pradesh, Punjab, Haryana, UP, Maharashtra and Gujarat. Also an increase in price is being envisaged to increase production of superior varieties so that popular brands may be produced at low prices. In place of imported tallow and edible oil, the use of bran oil is being encouraged. Also the government is importing edible oils once more (See last issue Vol. IV page 485) not for use in vanaspati manufacture but for distribution in fair price shops. Imported oils cost Rs. 7,500 a tonne against Rs. 9,000 a tonne of indigenous oil STC is exporting indigenous oil and importing cheaper palm oil and rape seed from Malaysia, sun flower oil from the Soviet Union and sesame seeds from Sudan.

Financing of Industry, Shipping and Agriculture : For the year ended June 30, 1974, IDBI reports lending Rs. 230.6 crores for industrial development making its 10 year activity amount to Rs. 1,010 crores. Last year's disbursals were Rs. 161.30 crores and for the 10 years Rs. 747 crores. Direct aid to industries was Rs. 65.3 crores including 2 technicians and 19 backward district schemes. Refinance nf industrial loans increased by 38 per cent, and financing of engineering exports jumped from Rs. 2.8 crores in 1972-73 to Rs. 35.7 crores in 1973-74. The IDA $ 25 million credit has been disbursed directly (Rs. 11.3 crores) and through SFC's (Rs. 26.2 crores). Its industrial consultancy service is operating in Gauhati, Cochin and Patna. This is a good record for the year. The Shipping Development Fund Corporation reports sanctioning Rs. 29.64 crores as loans to the shipping companies in 1973-74. In the 2 previous years, the companies acquired 22 ships, with this 1973-74 loan some 30 foreign and Indian made ships and tankers are being acquired. The RBI Bulletin for April 1974 sets forth an interesting review of agricultural advances by public sector banks which would be compared with the review in Vol. I No. 7 pages 4-7 of the Bulletin. The advances have increased from Rs. 162 crores in June 1969 (when they were to be nationalised) to Rs. 429 crores on March 1973, a 164 per cent increase, along with helping the farmers to move to a higher technological plane through use of the area approach. Direct finance to farmers increased from 28 per cent of agricultural advances in June 1969 to 63 percent in March 1973. The Southern region has the largest advances, and Tamil Nadu farmers are the third biggest group in getting loans. The marginal small farmers with holdings upto 5 acres are being well served with 44.7 per cent of all short term loans

particularly in the Southern, North Eastern and Eastern regions. Their share in medium long term loans must, however be enlarged. As far as co-operative credit to farmers is concerned the scale of credit support and the supply of scarce inputs to them needs to be worked out by State, district and block for the next 3 years and within the frame of credit restraints as the anti-inflationary frame.

Agricultural Production : The procurement policy of allowing wholesalers to operate, and procuring from them through a 50 per cent levy (See Vol IV page 342) has also not succeeded. The government announced that as at June 11, one million tonnes of wheat had been procured, compared to 3.5 million tonnes this time last year. As at July 19, 1.6 million tonnes of wheat and 70 lakh tonnes of milo had been purchased against the target of 5 million tonnes. At July 13 Kharif rice procurement was 3.76 million tonnes against the 5 million tonnes target, and coarse grains 3.69 lakh tonnes against the 1.65 million tonnes target. The government's food grain stock in early June stood at less than 4 million tonnes. The major reasons for the failure of procurement are the holding back of food grains by the farmers in expectation of higher prices, the wholesalers selling for the highest price and not meeting, their levy procurement obligation and some deciine in production from the estimate of 110 million tonnes. It is against this background, that the government announcement to import 1.8 million tonnes of wheat and obtain a second Soviet wheat loan of 2 million tonnes all amounting probably to 5 million tonnes. so that the government can hold a stock of 8 million tonnes for the public distribution system, should be seen. For the current year, whose food target is 117 million tonnes, the July position involves many uncertainties and problems. There is the problem of fertiliser scarcity hitting all States. Only Rajasthan and Orissa have been allotted their full need. Tamil Nadu received 1.18 lakh tonnes of nitrogenous fertiliser against its need for 1.3 lakh tonnes plus and 80,000 tonnes of phosphate and potash. UP has received 1.69 lakh tonnes against the 5 lakh tonnes it needs, Punjab and Haryana have received 50 per cent of their needs, and Andhra, Karnataka, UP, Assam, Kerala and West Bengal have received less than half of their needs. Under these conditions, in all States substitute programmes of green manuring, organic composting, gobar gas and land reclamation are underway. Also a calender of action is being worked out which fixes targets and delivery dates and amounts for fertilisers, pesticides and other farm inputs for each State. In addition the staff and students of the Agricultural Universities are being mobilised for the production and distribution of local language literature for the farmers, production of nucleus seeds which NSC can multiply, undertake pest surveys and crop protection, water management and harvesting, prepare contingency crop production plans and inter cropping commercial crops like mixing sugar cane and cotton with pulses, oilseeds and vegetables, produce and distribute microbial cultures and use of wastes as manures etc. During July, the major problem faced by farmers all over the country was the delay of the South West monsoon in the early weeks of the month. In early July, Kharif plantings were in full wing only in 5 states— Assam, Jammu and Kashmir, MP, Punjab and West Bengal. By the middle of the month there was a slight improvement with Bihar, Kerala, Maharashtra and Goa receiving rains and the start of farm operations. The best estimates are that against a Kharif target of 69 million tonnes the output may be less than last year's 67 million tonnes and not equal the 81.25 million hectares coverage of last year.

The government, however continues to be optimistic on the basis of the late rains in Punjab, Haryana, UP and the water resources of the southern region. It believes that the target of 69 million tonnes will be attained as a result of the increased area over which HYV is being used and the successful sowing of bajra, rice, jowar, cotton and and groundnut. But the late July reports of the extensive damage to crops from the Assam and Kerala floods, the declining trend in Haryana's food grains production and the problems faced by the farmers in Punjab and other States from late rains, inadequate fertilisers and heavy power cuts do not give room for such optimism. One feature of rice cultivation to which special attention is being given this year is pest control which is the major hazard for the crop unlike the wheat crop. Rice which is exposed to 10 different pests needs a pesticide umbrella if its yield which has increased only by 16 kg per hectare since 1897 is to be sharply increased. 20 new varieties have been developed and the Khudwani station in Kashmir reports developing 2 more new varieties, K-84 and K-78, which can increase the yield by 20 per cent in each case. But for this, action against rice pests is urgently needed and it is to meet this need that Union ministry has formed crop protection service squads in the major rice growing areas, which will be manned by the staff and students of Agricultural Universities for surveillance of crop pests, emergency eradication campaigns, and operating a control room where the reports of the pest surveys will be analysed for field action. If pests are controlled even by an additional 25 per cent, the Kharif rice crop will be considerably augmented. The stakes in the Kharif crop which produces 70 per cent of the Country's food grains are high and the optimising of the Kharif wheat, rice, and coarse grains crops is essential. Also the effect of the erratic monsoon on pulses, groundnut and oil seeds needs attention. The fall in the Saurashtra groundnut cultivation is worrying. In the case of oil seeds, the need is to increase the current output of 9 million tonnes by 3.5 million tonnes and the strategy here should be not only intensive cultivation of ground nut but more attention to sun flower, safflower and minor oil seeds like mohua, neem, karanji, kusum, khakar and sal. The pulses programme which has to raise an additional 2.5 million tonnes to reach the target of 14 million tonnes calls for some increase in the area cultivated, use of plant protection chemicals, and evolution of HYV pulses. The new short duration variety of the dhal can now be grown in rotation with wheat in all North Western States in addition to mung, urad and groundnut. The profitability of this inter crop culture should increase the pulses and oil seeds production.

Exports: The high rate of 23 per cent export increase for 1973-74 reported in the last issue (Vol. IV page 488) was, according to figures released by the Union ministry, maintained in the first two months, May and June, of this year at Rs. 389.3 crores compared to Rs. 318.4 crores of the first 2 months of last year. A disturbing element in this growth of export earning referred to in Vol. IV page 428 is now confirmed by the results of the study released by the Indian Institute of Foreign Trade, wherein a sample study of 32 export items shows that 86.7 per cent of the increased export earnings were due to higher world prices and only 15.2 per cent due to increased quantum of exports. Even more disturbing is the same trend operating throughout the Fourth Plan. During the preceding four years 1968-69 to 1972-73, 58.2 per cent of our higher export earnings was due to world inflation and only 40.1 per cent to higher quatities. This trend does not however apply to three of our important exports--iron ore, tea and coffee.

In the case of iron ore, the opposite trend obtained. Last year 80 per cent of increased earnings was due to increased quantity exported, and in the 4 previous years there was a 22 per cent fall in unit value realised and 129 per cent increase in quantity. Here it is important that the working group of iron ore producing countries should join together and link iron ore prices to steel prices. MMTC's plans to increase ore production and improve its quality should be matched by speedy transport by the railways, and the small start made in raising the price of ore sold to Japan by 11.30 per cent should be further increased and universalised. So too tea exports increased their earnings by increasing the quantity exported (65 per cent), with only 29 per cent due to the higher price. Here the tea exporters' group meetings in FAO referred to in the last issue (Vol. IV page 496) should establish a higher price and unit realisation for tea production. In the first half of the current year mill made cotton textiles exports earned Rs. 118.99 crores against Rs. 78.79 crores for the corresponding period in 1973 but this again was mainly due to higher unit realisation at Rs. 3.15 per sq. metre compared to last year's Rs. 1.89. There are 2 further problems. The importing countries are resisting the higher cost of Indian textiles as the slump in the May exports shows. The second problem is that while garments are in demand, the demand for cotton piece goods seems to be slackening. The largest importer of textiles is the US at Rs. 17.33 crores in the first half of this year compared to Rs. 6.50 crores in the same period last year. It is good that in mid July the new textile agreement with U.S. providing for an annual 7 per cent growth was finalised. In fact India's total exports to US have been rising, reaching $ 132 millions (Rs. 105.6 crores in the first quarter of 1974, the imports from the U.S, being $ 71 million (Rs. 56.8 crores) during that period. Further an Indo-US barter agreement was also signed in mid July, under which India will export engineering goods and receive in return electric power generation and transmission equipment and textile machinery, Similar textile agreements need to be concluded with UK, Australia and EEC. Silk fabrics export also rose by 30 per cent in the first six months this year (Rs. 6.8 crores), to some extent due again to higher prices. Pepper exports will be earning Rs. 25 crores this year compared to last year's Rs. 20 crores though the quantity exported will be 2,000 tonnes less. U.S. and Eastern Europe are the main importers. Exports under GSP are slowly picking up, amounting in 1973 to Rs. 160.64 crores, West Germany and Japan and Switzerland being the main importers. The small share of 11 per cent of engineering goods in GSP should be improved. Handicrafts exports were also keeping up amounting to Rs. 110 crores last year. The area where an intensive export drive has to be made is to the oil producing West Asian countries who will be exporting to us about Rs. 1,000 crores of oil. Here we need to export iron ore, cotton and jute textiles and engineering goods besides undertaking joint projects. Export policy should aim at ensuring 75 per cent increased earings from increased quantity and only 25 per cent from higher prices.

Aid: In July India signed an agreement with West Germany for 360 million Marks (Rs. 108 crores) for technical aid and agricultural development projects plus a re-scheduling of the 130 million Mark debt. The agreement also provided assistance for the Indian chemical fertiliser industry and coal mining. Also in July the government signed an agreement with the United Nations Family Planning programme for a grant of $ 40 million over the Fifth Plan

for supplies and training facilities to strengthen and intensify the country's family planning programme.

International :

Bangla Desh: Bangla Desh's Planning Commission report on the economy in 1973-74 records a shortfall in achievements of most production targets, with a growth of 20 per cent over the previous year but 30 per cent below the pre-liberation targets for 1969-70. Due to scarcity of materials and spares, power cuts, and labour unrest–factors all too familiar to this Country–the lowered jute and textile targets were missed by around 10 per cent. Steel production was 80,850 tonnes against a 1 lakh tonne target, sugar production was 86,000 tonnes against a one lakh tonne target, though in engineering and ship-building and food production the targets were exceeded. To spur industrial production, the government therefore announced in mid July a new industrial policy giving private and foreign investors more incentives within the framework of a socialist economy. While basic and strategic industries are in the public sector the investment ceiling in the private sector is raised from 25 lakh takas to 3crore takas, the period of nationalisation moratorium is extended from 10 to 15 years and foreign private investment is permitted in collaboration with both government and local entrepreneurs, remittance facilities for foreign firms are liberalised and tax holidays and other incentives offered for industries in backward areas. These modifications, it is hoped, will spur the growth of industries in the current year. Indo-Bangla Desh trade recorded some pluses and minuses in July. India did not purchase the agreed quantity of Bangla Desh jute. Against the target of 30 lakh maunds by September, India has purchased only 2.69 lakh maunds by end of July. The Indian government has revised the list of items from canes and rattans to auto rickshaws, comprising some 12 items in order to speed up deliveries to Bangla Desh. An agreement for India to export to Bangla Desh 500 wagons and 50 coaches from the I.C.F., under the Rs. 25 crore credit line (See Vol. IV page 431) is being finalised. The government has also a taka 220 crores import policy to import raw materials, machinery and spares for industrial growth. Refined fuel, coal, cement and machinery spares have large allocations, half of which will be financed from export earnings and the other half from foreign loans. Two Bangla Desh-EEC agreements have been concluded on jute and jute goods and handloom products of silk, cotton and handicrafts. This opening with EEC should be further expanded to cover more goods.

World Monetary Reform: On the world monetary front 3 developments were recorded in July. First consequent on the US House of Representatives lifting the ban on private ownership of gold in the US, the price of gold fell sharply to its second lowest level this year from $ 142 per ounce to $ 128.75 in early July, but recovered to $ 150 per ounce at the end of July. There was also a parallel weakening of the U.S. dollar. Second the IMF's monthly statistics for May showed (a) a rise in international reserves of all industrial countries to SDR 94.6 billion (b) a fall in the reserves of European countries (except that of West Germany) to SDR 60.5 billion, (c) a sharp increase in reserves of the oil producing countries, Saudi Arabia, Iran, Iraq and Kuwait, (d) an increase in the imports of industrial countries to $ 90.8 billion in the first quarter of 1974 compared to the $ 80.2 billion in first quarter of 1973, (e) an increase in their exports from $ 433.9 billion in the last quarter of 1973 to $ 436 billion in the first quarter of 1974 and (f) an accelerated rate of inflation in the period between the

first quarters of 1973 and 1974 by 11.5 per eent in developed countries and 30 per cent in developing countries. Japan registered the highest rate in this period at 23 per cent. Third, following the decisions of the committee of 20 on world monetary reform summarised in the last issue (Vol. IV pages 432–433) an outline of reform has now been circulated to the Fund's Board of Governors to be decided at its annual meeting in Washington on September 30. The outline in the form of a draft resolution proposes (g) an Interim Committee of the Board of Governors to advise the Board on the management and adaptation of the International Monetary system including operating the adjustment process, reviewing developments in global liquidity and the transfer of real resources to developing countries and considering the Executive Directors' proposals to amend the Articles of Agreement, (h) each member country or groups of countries which appoints an Executive Director will be a member of the Interim Committee, (i) the Executive Directors to prepare the draft amendments to the Articles of Agreement for approval by the Board of Governors which will (i) establish a permanent council with decision making power to supervise the management and adaptation of the system, (ii) enable the Fund to legalise the position of countries with floating rates during the interim period, (iii) help in the execution of the Declaration of Trade Measures, (iv) amend the provisions for gold, (v) establish the link between development assistance and SDRs and (vi) improve the General accounts and SDRs rules. In addition the executive Directors took the following decisions which became effective as of July 1974: (a) the interim valuation of the SDRs which provides that one SDR will be equal to a basket of the currencies of 16 countries that have a share in excess of 1 per cent of world exports during the 5 year period 1968-72, (b) the SDR interest rate which is fixed at 5 per cent per annum to be adjusted to the combined average of short term interest rates in 5 major countries, (c) the charges on use of the Fund's resources are 4 per cent for 1 year and 6 per cent for 4 to 5 years, and (d) the oil facility to which 8 countries have contributed $ 3 billion to help countries to meet the impact of increased oil prices on balance of payments which must be repaid as soon as their balance of payments permits and in any case not later than within 7 years, at an annual interest rate of 7 per cent. These are the limited next steps that are being taken for an interim monetary system, which does not meet the basic problems of inflation and floating exchange rates—let alone the interests of developing countries.

World aid and trade: The Development Assistance Committee of the OECD's report for 1973 records a lower share of the GNP of the developed countries going as assistance to the developing countries in that year. With fall in soft loans and a larger volume of commercial flows, the resource transfers terms hardened against developing countries. The Indebtedness of the developing countries also rose sharply during the year, with a Euro-currency borrowing of $ 9 billions alongside of official expost credits and private flows at market terms. Official development assistance (ODA), which is the only real aid, from the 17 developed countries of DAC declined from 0.34 per cent of their combined GNP in 1972 to 0.30 in 1973, whereas it is supposed to reach 0.70 per cent by 1975 according to their pledge in the Second Development Decade strategy. Net ODA increased by 9 per cent at $ 9.4 billion at current prices, but was stagnant if account is taken of the effect of changes in exchange rates and the inflation factor. In gross terms the total flows (ODA plus commercial credits) increased from $ 19.9 billions in 1972 to 24.2 per cent, which

was a 6 per cent increase in real terms, representing the same as last year's 0.78 per cent of the rich countries' GNP. The ODA element in the total plan fell from 44 per cent in 1972 to 30 per cent in 1973, though the grant element in ODA increased from 84 per cent to 87 per cent. The aid prospects for this year, with the balance of payments problems of the industrial countries, a fall in their growth rate from 4.7 to 3.5 per cent and the oil producing rich countries joining their ranks are not bright. Against this background, the World Bank's plan for the next 4 years is to increase its lending by 5 per cent in real terms, reduce its liquid reserves, and increase its interest rate from 7.25 to 8 per cent. Its 4 year lending will be $ 22.1 billion which is a 60 per cent financial increase but in real terms a 5 per cent annual increase. In addition, IDA will be lending $ 8 billion. This programme, the Bank President points out, will benefit 300 million people in 40 poor countries, but leaves out another 800 million people with per capita incomes averaging less than $ 200 a year who will be affected by inflation, changing exchange rates and a rise in commodity prices. The U.S. congress in early July finally approved the U.S. contribution of $ 1.5 billion to IDA's next replenishment (See Vol. IV page 433) making IDA a reality. The rider attached to the bill will force its representative to vote against IDA credits to India, which are an important sector of IDA's plans. Japan announced in July a contribution of $ 100 million to the UN emergency fund to aid the countries most seriously affected by the soaring oil prices (See last issue, Vol. IV page 433). Another major development was the trade agreement concluded between EEC and 44 African, Caribbean and Pacific countries at the end of July under which EEC will grant the 44 countries free access to its markets without reciprocity improve the terms of their agricultural exports, finance the stabilisation of the export earnings when tied to certain raw materials and triple aid to $ 3,200 million over the next 5 years. This opening of the trade channels is even more important than aid provisions.

World Food: Further to the two documents for the UN World Food Conference to be held in Rome in November (analysed in the last issue, Vol. IV page 491) the inter governmental preparatory committee has established the draft agenda of the conference as follows: (a) assessment of world food situation based on the 2 documents, (b) national and international programmes of action including (i) measures for increasing food production in developing countries, (ii) policies and programmes to improve consumption patterns, particularly of vulnerable groups in developing countries, (iii) strengthening world food security through early warning and food information system, national and international stock holding, and emergency relief and food aid, (iv) improved international trade including stabilisation and expansion of export markets and (v) the setting up of operational machinery to execute the recommendations of the conference. All the U.N. agencies including the World Bank and IMF will be responsible for following up the decision of this important event. For 1973 the U.S. Department of Agriculture, on the basis of a good Asian monsoon, estimates a record output of 307.6 million tonnes of paddy, which is a 97.4 per cent increase over 1972. Bangla Desh's crop increased by 23 per cent, Philippines by 25 per cent, Thailand by 14 per cent, China by 5 per cent, India by 23 per cent, Australia by 4.2 per cent and U.S., 8.2 per cent. Latin America, North Vietnam, Cambodia and Sri Lanka registered declines. Similarly, world production of palm oil is estimated to increase by 13 per cent at 2.5 million tonnes this year, with Malaysia, Indonesia, Ivory Coast and Zaire producing 65 per

cent of the output. This should relieve the shortage in India.

Law of the Seas: The U.N. Law of the Seas Conference about half way through its 10 week session is slowly arriving at a consensus, under which the maritime powers U.S., UK, Japan, USSR and the developing countries are coming round to an agreement on the major issue, the sea boundary question referred to in the last issue Vol. IV page 492. The maritime powers are agreeable to the position of the developing countries—That the territorial limits should be 12 miles or 15.2 kms. for coastal jurisdiction, an economic zone of 200 miles or 320 kms. for exclusive fisheries and exploration rights and in return want an agreement on freedom of navigation in straits, (of which there are over 100 in the world) and the provision on the payment of a fee for foreign fleets to enter the zones of other countries for highly migratory fish or when the State concerned cannot exploit its fishery resources. There is emerging an agreement around this package, provided 'unrestricted passage' is defined, pollution and security interest are allowed for and the question of freedom of scientific research of the oceans are made precise. If agreement is reached on this package, it will be a great step forward for the development of all countries, particularly the poor ones.

World Industry, Paper and Energy: UNIDO's Industrial Development Board meeting in July in Vienna was concerned too much with internal organisational problems—UNIDO advisers, their financing, the SIS and other institutional arrangements. There were important issues related to the General Assembly declaration on the new International Economic Order and its Industrial development implications, a proposal by the Philipines that developed countries should concentrate on capital and technology intensive industries and phase out to the developing countries raw materials and labour intensive industries on which substantive discussions and recommendations to its second general conference to be held in Lima from March 12-26, 1975 could have been made. The FAO Advisory Committee on pulp and paper meeting in June has issued a serious warning that if paper board consumption grows next year at the 5.5 per cent rate of the past decade, the world—that is the developing countries—will face a shortage of 8 million metric tonnes in 1976, against the current production of 167.8 million tonnes. It noted that educational, communicational and commercial programmes of the developing countries are being severely limited by paper shortage. India is one of the worst sufferers, with paper prices higher by 300 per cent alongside of non-availability of paper. In addition to increase in investment in the industry as proposed by the committee, there is need for some restraint in the consumption of paper by the rich countries—not more than a 5 per cent cut to meet the priority needs of the poor countries. An interesting development is the decision of OPEC Arab countries to set up an Energy Institute for the development of energy sources by the oil producing Arab countries, instead of merely acquiring foreign technology as they have been doing to date. In addition the OPEC Arab countries have decided to set up a $ 1,100 million Arab petroleum investment company to finance joint projects and development programmes in Arab countries. This is just the beginning of the rapid development that this region can plan and execute.

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II Agricultural Development

Paddy:

Food grains production in the State in the last year of the plan, was 69 lakh tonnes (See Vol. IV page 364) and the Fifth Plan target is an ambitious 91 lakh tonnes. This year, as noted earlier and in Vol. IV last issue page 494, the late monsoons have delayed Kuruvai sowings by 3 weeks. By mid July, however, farm operations picked up, including nursery activities and transplantation covering Mayuram, Kumbakonam, Thanjavur and Mannargudi, so that five lakh acres were sown in Thanjavur district. Mettur water released from July 20—about 3 weeks late this year—does push the farmer and his Kuruvai crop in to the north east monsoon but with the stiff straw, non-lodging, non-sprouting high yielding Karuna, Kannagi, Karikalan, and the short duration (90 days) ADT-30 and medium duration IR-8, Ponni, Triveni imported from Kerala and the CU-2 referred to in the last issue (Vol. IV page 494) which the tail end farmers can use, the problem of Kuruvai and Thaladi overlapping and Kuruvai harvest being caught in the second monsoon can be mitigated. The late rains have also been met by the new paddy method of raising paddy seedlings (See Vol. IV page 435) under which seedlings are available within 10 days of their planting. It is a difficult situation this year for the Kuruvai crop and it is hoped that the farmers will be helped in every way possible to meet the situation. An agreement on farm wages for East Thanjavur area covering Mannargudi, Tiruturaipoondi, Nagapattinam, Nannilam, Mayuram and Sirkali following the last agreement (See Vol. II No. 10 pages 4-5) was reached at the end of July under which men workers will receive 6 litres of paddy and Rs. 2.75 per day or Rs. 6 per day and women 6 litres of paddy and Rs. 1.50 per day or Rs. 4 per day. During the harvest season, for every 54 litres of paddy harvested, wages would be 6 litres of paddy. For the farm labourers at least, this agreement reduces the impact of the rising prices of rice that Thanjavur and the State faced in July as reviewed earlier. In view of the 50 to 90 paise rise in price, rice was distributed at fair price shops at Rs. 2.50 a Madras measure. With the anticipated Kuruvai harvest, the price should ease further.

Fertilisers:

As in the rest of the country, fertilisers are in short supply. The quantity available is about two third the farmers' needs, as noted earlier. But this period of shortage could also be used to undertake better crop management, and more efficient land and water use. The State farmers are being taught to cut potassium and phosphorous in certain areas, to give up nitrogen, apply fertilisers in small and split doses and go in for close planting of seedlings. Madras Fertilizers, the Agricultural University and other fertiliser producers, are helping to educate the farmers in efficient use, crop rotation of legumes, soil analyses, selection of suitable HYV for each soil type, split application of N and K. and weeds, pests and water control. In addition a special drive is on to restore to the farmer his traditional and inherent skill in composting and use of green manure, rural and urban waste, cattle dung, most of which he is well aware of but which have been neglected with the flooding of his field with chemical fertilisers. Farm composts can be increased and improved through conservation and scientific treatments.

Further Food crops:

In addition to the Indo-German project in the Nilgiris (See Vol. III page 418), the

Tamil Nadu agricultural University, has under the hill area development programme, a Rs. 8 crore project for growing improved seeds of potatoes, exotic vegetables and flowers in the top sub-area, the development of planting materials for cloves, mutmegs, peaches, pears and oranges in the middle sub-area and the intensive cultivation of tapioca, paddy, ginger, pepper and arecanut in the lower Gudulur sub-region. With 20 cold storage units, the fruits, flowers and vegetables will be marketed in and outside the State. Another group of food grains to which special attention is being paid, after a long period of neglect, is the coarse grains grown under dry land farming conditions. This group covers, as analysed in Vol. I No. 6 pages 16-40 cholam (jowar), cumbu (bajra), tenai (naivone), varagu and panivaragu, ragi, kudiraivalu as well as maize. With the shortage in rice Supply, the near doubling in the price of coarse grains as well as their demand by the poor and for industrial use, it is time for special programmes to be launched in the State to help the farmer—the marginal, small and dry farmer-to grow these millets with HYV and the adequate dose of manures and fertilisers. Such a programme is set forth in the Institute's publication—Economics of Dry Farming in Tamil Nadu. The July seminar in Madras on these dry crops has laid plans for increasing their output from 14 lakh tonnes to 40 lakh tonnes using HYV cholam and cumbu. Also in continuation of the plan to develop tapioca intensively in the State referred to in the last volume (Vol. IV page 494), the government is setting up 25 State farms each of 100 hectares to grow HYV of tapioca. They will serve as demonstration centres leading to extensive cultivation to grow by the end of the Plan around 50 lakh tonnes of this food crop. As part of the Madras Vegetable Scheme Co-1 Papaya seedlings, banana suckers, coconut seedlings, and vegetable and fruit plants are being distributed for growing in home gardens to supplement the limited market supplies of these varieties.

Sericulture:

Two centres – Sathyamangalam in Coimbatore district and Maradi in Tiruchi district—are being developed as sericulture centres on how silkworms can be reared at low altitudes. For this agro-based cottage industry, these centres together with the government cotton market at Palladam will help the farmers in Coimbatore growing mulberry over 350 acres, Salem (100 acses) and Chingleput (75 acres) extend the mulberry cultivation area this year to 1,500 acres and to 30,000 acres by the end of the Fifth Plan and provide them with marketing facilities. The Research centre at Coonoor and its sub stations at Hosur and Talavadi will help the growers with cuttings of new breeds and combinations of high yield for which an allocation of Rs. 6.11 lakhs has been made for this year by the government.

Groundnuts:

In mid July the government reported that between April 1 to July 8, 1.41 lakh tonnes of groundnut kernels had been exported out of the State compared to the export of 1.7 lakh tonnes for all of 1973-74. Pending a re-check of these figures, it stopped the export out of the State of groundnuts or oil. With Gujarat the other major producer, also following the same policy, oil supplies in the Country have been affected. The basic problem is of course to increase the production of groundnuts and in fact all oil seeds increasing sunflower and safflower. With the rise in the price of groundnut, it would now be profitable for the farmer to grow irrigated groundnut or intensify its cultivation in areas of assured rainfall like Pollachi, using the well tested HYV pol 1, TMV-10, along with better manuring and pest control.

Long term farm financing.

The power shortage in the State and the diesel shortage in the Country is slowing down long term agricultural financing in the State. The annual report of the Tamil Nadu Land Development Bank records a fall in loan disbursals of Rs. 2 crores in 1971-73 and an equal amount for 1973-74 for several reasons: (a) 90 per cent of its loans are for wells and minor irrigation. With the power cut over the past 2 years, 9,000 wells dug or deepened by the farmers are not energised, resulting in non disbursal of loans for installation of diesel pump sets. (b) 9,000 electric motors purchased with its loan funds have not received electric connection and so the farmer is paying interest without any return and is not wanting any further loans. (c) the number of tractor loans is also declining because of diesel shortage and the increased cost of tractors, spare parts and diesel, making it difficult for the farmer to repay the loan in 7 years. He is not able to use the tractor for the 1,000 hours needed to repay the loan. (d) Finally of the 2,446 registered lift irrigation co-operatiʌes, only 159 are functioning, so that of the Rs. 3.92 crores of loanable resources, they have drawn only Rs. 79.85 lakhs and are not providing the farmer with needed services. The main sufferers of these lags are the small and marginal farmers. Under these conditions, the RBI and the Government should permit the Land Development Banks to enter new fields such as (i) using loans to purchase the land which the tenant is farming or carrying out improvements in the 47,000 acres of land which have been distributed to landless labourers or improving the house sites granted to the 1.73 lakh farm workers in the State and (ii) funding the digging of 20-30 feet wells in the areas where the ground water table is not low for which bullock power can be used. In addition, agriculture should be given some priority on diesel supply and its power quota should be regularised so that the small farmer can use the long term finance facilities available to him.

Dairy Farming:

Further to the reference to Operation Flood in this State in the last issue (Vol. IV page 497), three developments in dairy farming may be noted. Ftrst at Erode a team of the National Dairy Development Board (NDDB) has developed 15 milk producers co-operatives which are run by the farmers, producers without government intervention or loans and supplies 2,000 litres per day to TNDC for Madras. The societies (a) pay the producer promptly (b) fat test the milk in his presence (c) pay a uniform economic price (d) collect the milk twice a day from the producer and sell it to TNDCC (e) use this twice a day service to provide prompt veterinary assistance to him and (g) share out 60 per cent of the profits as bonus. This is a new type of co-operative—the real one—and if the opposing vested interests of private dairies can be overcome, can become the pattern for all our Operation Flood districts—Coimbatore, Nilgiris, Madurai, Salem, Dharmapuri, South Arcot, North Arcot, and Chingleput,. Seeond as noted in Vol. IV page 366 the first milk powder plant under Operation Flood in Madurai is being opened in November, a second owned by the co-operatives in Erode and a second dairy at Ambattur at the end of the year. Third TNDCC has from July, which is the start of the lean season, switched over to the supply of toned milk which contains the same solids and proteins but lesser fat. From October when the calving season begins until next June again it will supply standardised milk. The price of both types of milk has been increased from early July by 20 paise a litre.

Tea:

While world tea production for January-May 1974 declined by 4.7 million kg. to

2.38 million kg. South Indian tea production despite drought, power cuts and the shortage of inputs increared by 4 million kg. compared to January-May 1973 to 40.8 million kg. (North Indian tea production was even higher by 8.2 million kg. to 63.8 million kg.) Exports for January-April from South India was 38 million lb, and increase of 4.3 million lb. over the first four months of 1973. The price of South India tea rose to Rs. 7.93 per Kg. compared to last year's Rs. 5.87. Tea production prospects in May were good because of the showers in all the planting districts but June was a dry month and might affect the crop. The FAO tea producers' meeting (referred to in the last issue Vol. IV page 496) has yet to be followed up, increasing prices and the need for India joining with Sri Lanka and following it in a programme of generic promotion to be undertaken by Tea Councils of UK and other European countries advocate in Vol. III page 643 and Vol. IV page 289, of the Bulletin has yet to be acted upon. The State government is establishing 6 new industrial tea co-operatives in the Nilgiris in addition to the existing well run 8 with a membership of 3331 small planters.

Coffee:

Based on present trends, the current year's coffee crop is estimated at 85,000 tonnes and not 93,000 tonnes as forecast in Vol. IV page 368, The Coffee Board had earlier allotted 56,000 tonnes for export out of the 1973-74 crop, which may now be revised in view of the lower production estimate. Exports of coffee for April-December 1973-74 totalled 53,552 tonnes earning Rs. 46.46 crores. This is one of the export items where there was a rise in both quantity (50.855 in 1972) and value (Rs. 32.93 crores), The bonus dispute between plantation workers and managers was settled in mid-July under which tea estates will pay 11 per cent and coffee estates 10.5 per cent as bonus, totalling Rs. 1.5 crores.

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III Industrial Development

Foreign Collaboration:

As a result of a 3 week visit to the countries, the Minister of Industries in early July announced 6 collaboration agreements and 5 project discussions with foreign firms involving total investment of Rs. 25-30 crores. The signed agreements include (a) FOB, Yugoslavia and Amalgamations, Madras will join with the State government in a mechanised foundry to produce high quality grey iron castings at a cost of Rs. 11 crores. (b) Leather Central, Roumania and Kamsons will collaborate with the State government in setting up a Rs. 2 crores leather finishing centre for export of leather goods. (c) A Czechoslovak firm with Asia Bearings will set up a Rs. 10 crores ball bearing plant to produce 10 million pieces to be expanded later to 50 million pieces. (d) A Swedish firm will assist 2 technocrata in a joint sector project to produce manufacturing measuring instruments. (a) Plessery, Scotland will assist a joint sector unit

in producing electronic capacitors at a cost of 2 crores and (f) Manx Stone, Isle of Man will join TANSI in cutting and polishing Dharmapuri stones. In addition, discussions covered possible collaboration with glass and knit-wear industries in Roumania, the conversion of Tiruvannamalai magnetite ore into iron, using coal gas with the help of the sponge iron plant in Hamburg, establishing a marine diesel plant with West Germany, Textools diversification being assisted by MWM of West Germany, manufacturing of seamless tubes with the help of Czechoslovakia, BHEL and the government and a petro chemical complex with Roumania. The power and other infrastructure for this important group of proposals needs to be developed.

Neyveli:

As reported in the last issue (Vol. IV page 498) the Rs. 16 crores machinery and equipment for the Neyveli expansion has been ordered from West German firms in July. Its financing is part of West German credit for 1974-75 to India, This one time foreign exchange cost of Rs. 10 crores should be contrasted with the annual cost of Rs. 10 crores (also foreign exchange) for oil firing at Neyveli because the lignite production is insufficient. The same considerations apply for the second mine cut which has not yet been formally approved by the Union government. Every one – the Department of Mines, the Ministry of Finance and the Union Planning Commission—is reported to be sympathetic but no decision has been made. The State Industries Minister in pursuance of the proposal for Southern Structurals and Larsen and Toubro producing part of the second mine cut equipment, (See last issue, Vol. IV page 498) had successful discussions with the German firm to collaborate in this project when the second mine cut is approved.

BHEL:

BHEL, Tiruchi, is undertaking four new programmes to meet the power needs of the country. First it has taken on the order from the department of Atomic Energy— the first in the Country — to design, manufacture, inspect, test and provide guarantees for the steam generating equipment for the Kalpakkam atomic power project unit II involving Rs. 67.5 lakh labour and Rs. 1.2 crores raw materials. Second it will also produce the steam equipment for the atomic power station at Narora in UP. Third it will supply the head exchangers and steam generators for the fast breeder test reactor project in Kalpakkam. Fourth, its research division is working on MHD and fluidised boilers (See Vol. III page 389). BHEL in Hardwar, in collaboration with oil wells USA will be manufacturing again for the first time in India, oil drilling rigs for off shore exploration, using to the maximum other units to make sub-assemblies and components. BHEL's technical expertise and management excellence are thus being used in these important projects.

ICF:

The integral coach factory is engaged in four important projects. As noted earlier, it is producing 50 coaches for Bangla Desh at a cost of Rs. 5 crores and has also secured export orders for 30 coaches for the Philipines and 96 for Taiwan. Its export section has become important. Second it is working on new coach designs which will strengthen, with the help of imported Japanese corten steel, the parts of the all steel coach which corrode quickly. Third, with Russian collaboration, it is designing coaches for Calcutta's mass rapid transit system. Fourth, the production of a new type of 48 berth air conditioned coach has been intensified. The factory is at the forefront of coach design and production in the Country.

SIPCOT :

SIPCOT's plan for industrial complexes in backward areas started in Ranipet (See Vol. IV pages 39 & 371) where 60 per cent of the plots have been allotted and its units going into production at the end of the year. The Secalo plant inaugurated in July is using the technique of ceramic moulding process for economy in metal castings and involes a 40 per cent savings in total cost over the conventional method and also saving in foreign exchange. At the Hosur complex (See Vol. IV page 371) a Rs. 8 crore private sector textile machinery manufacturing unit has been established. On the 1,200 acre site, 20 applications for locating Rs. 20 crores projects are being processed, particularly in manufacturing engineering, electric and electronic goods instruments. The Hosur complex has its own housing facilities. A third complex is being developed on the 1,000 acre area at Manamadurai (Ramanathapuram district). Here a mechanised salt factory under the newly formed Tamil Nadu Salt Corporation is being established to promote salt based industries in the area.

SIDCO—Functional States :

As part of the programme to assist small industries and technician-entrepreneurs, SIDCO has set up a comprehensive technical consultanoy service. (See Vol. IV page 372). The service will advise industrialists and technicians on the areas to be developed and markets—Indian and foreign—open to their products. The government also announced plans to provide facilities, through functional industrial estates and calibration laboratories, for increased production of instruments. The Instronic Estate at Adyar (See Vol. III page 578, Vol. IV page 218) has 52 units, 40 of which are producing television receivers, tape recorders, car radio sets (of which Rs. 40 lakhs have been exported), process control instruments and level indicators. In addition, an electrical-cum-electronic industrial estate at a cost of Rs. 67 lakhs is being established near Mahabalipuram adjacent to the Adyar Estate. An electronics testing laboratory is being set up at Madurai with an outlay of Rs. 7.15 lakhs, a similar estate at Coimbatore at a cost of Rs. 7.25 lakhs to be followed by estates at Salem, Hosur and Tiruchi, alongside of the services centres for electro-medical equipment to service and repair specialised hospital equipment at Guindy, Thanjavur and Madurai. All these units are being aided by the Data Bank and Information Centre at Adyar established at a cost of Rs. 1.5 lakhs on problems faced by the electrical and electronic units. It is now time that these estates had their own corporation.

Ceramics :

The government established in early July, the Tamil Nadu Ceramics Corporation with a capital of Rs. 2 crores to take over the ceramic units under SIDCO and develop the industry further. The Vriddachalam Ceramics complex producing sanitary wares, insulators and crockery at the rate of Rs. 40 lakhs per annum is being expanded to produce at the rate of Rs. 60 lakhs and a second unit is being set up to manufacture also pressed insulators, fine clay and high alumina refractories in larger numbers. A tunnel kiln at a cost of Rs. 22 lakhs is being set up for the complex, to standardise their products and increase their sophistication. Also some 15 sub units to produce electronic ceramics are being developed in the complex, using the technology developed by the National Physical laboratory.

Cement :

Further to the serious situation of five private sector cement plants and the one public sector unit in the State analysed in

Vol. IV pages 442-443, the 60 per cent power cut plus the coal shortage resulted in their producing only 50 per cent of their annual capacity of 34 lakh tonnes. Tamil Nadu uses 15.6 lakh tonnes of cement per annum, Kerala 8.4 lakh tonnes and the Andamans 60,000 tonnes. All of them face severe shortages. On top, the industry urgently needs a price rise. On July 4 the government announced a price rise of Rs. 4 per tonne to compensate for the freight increase announced in the 1974-75 railway budget (See Vol. IV page 266). This is an automatic increase which takes place every time the railway fare increases as it has since 1960-61. To meet the increased costs of the industry, the Tariff Commission recommended a 30 per cent increase in the retention price of existing units and a larger rise for expanding and new units, but as of the end of July there was no government decision on this issue. This is somewhat surprising because the government announced on July 24 in the Lok Sabha that the industry suffered a loss of production of 25.49 lakh tonnes during the 9 months, September 1973-May 1974 and a rather heavy financial loss. A decision on the price is needed.

Sugar:

The forecast for sugar production in the State set forth in the last issue (Vol. IV page 499) is likely to be surpassed. As of 30 June the factories had crushed 48.47 lakh tonnes and produced 4.13 lakh tonnes of sugar, compared to last year June end's figures of 36.98 lakh tonnes and 3.08 lakh tonnes. This increased production, together with the lower government release, the credit squeeze, the non announcement by the government of the final levy price and the plan to crush for a longer period has resulted in accumulation of stocks in the Tamil Nadu mills and a stringent financial position. The State government announced the location of 5 of the new sugar mills referred to in the last issue (Vol. IV page 499) namely Thanjavur, Perambalur, Tirukoilur, Sivaganga and Sankarankoil. Since April, sugar exports have earned Rs. 171 crores and plans are underway to further increase the exports by cutting back on domestic consumption.

Paper:

Given the severe shortage of paper in the Country (See last issue Vol. IV page 486) the timely establishment in the backward region of Melur of a private sector paper mill with a capital of Rs. 25 lakhs and a total cost of Rs. 1 crore with help from TIIC and SIPCOT is timely. The unit which will go into production next year will use waste paper, jute rags and pulp and produce 12 tonnes of glazed paper and Kraftlines per year. It will also add a Rs. 15 lakh pulping unit later to its establishment.

Leather:

Two developments marked the leather industry in July. First the government's decision to merge the Leather Export Promotion Council on which the State is adequately represented with the Export Promotion Council for finished leather and leather goods on which Kanpur has over 400 members does not make sense as Tamil Nadu accounts for 80 per cent of leather exports while Kanpur, Bombay and Calcutta for 20 per cent. The representation of the trade on the new council should be corrected. Second the transition from exports of hides and skins to semi-finished hides and skins led to a 44 per cent decline in EI tanned hides and skins exports and 67 per cent fall in blue chromes exports in value and even greater fall in quantum for the month of April. The worrisome problem is that

Indian leather is being outpriced and out sold by Argentine supply and with the reopening of the Suez, East African supplies will become sizeable. Also as pointed out in Vol. IV page 214, the credit squeeze in Europe and the energy crisis in U. K. are contracting the leather market. In this situation there is need for the plans to develop finished leather goods to be executed speedily.

Handloom :

The major development of the handloom industry in July was the release of the report of the Sivaraman study team and its review by the All India Handloom convention in Madras. The study group's main recommendations are : (1) establish the All India Handloom Board as a statutory Board and a separate Developmental Commissioner for Handlooms. (2) 60 per cent of handloom weavers to be in co-operatives against the present 30 per cent. (3) intensive development of those outside in groups of 5,000 to 10,000. (4) setting up an All India Research and Design Development Association. (5) powerlooms to be brought into the excise structure of mills and powerloom excises to be used to develop handlooms. (6) the textmark should be reintroduced for powerlooms. (7) setting up co-operative spinning mills to meet yarn needs of handlooms, and use of nationalised mills for the same. (8) IFC and other financial institutions should finance the sector. (9) the Union government should help modernise handloom and State governments ensure distribution of yarn to the weavers, and (10) special incentives for exports. The convention emphasised the need to reserve sarees and other such lines for handlooms and penalise infringements, fix ceiling and floor prices of yarn and apply differential interest rates to this sector. It is now for the Union government to act on these important recommendation.

Handicrafts :

The annual report of the Tamil Nadu Handicrafts Development Corporation with its 14 branches in the State and one each in Bombay and Delhi records a profit of Rs. 1 lakh last year—the first year of its operation. It is therefore giving a bonus to 500 artisans, Rs. 40,000 in the form of shares to selected artisans to increase their involvement and participation and advances of Rs. 5,000 as small artisans loans. It plans to open further branches in Calcutta, Orissa, Rajasthan, UP and Karnataka to expand its market.

Private sector reports :

The annual report of Kamala sugar mills for 1973 records Rs. 12.6 lakh profits in spite of production of glucose at 20,000 tonnes against a capacity of 50,000 tonnes due to raw material shortages, the power cut and the increased price of furnace oil. The modernisation programme for a new boiler and steam distribution system is continuing and a plant is being established in Kerala to ensure continuing supplies of the raw material, tapioca. The annual report for 1973 of Trimurti mills records the same level of yarn production as 1972 which was good in view of the power cut and increased cost of furnace oil. The spining section is being renovated with a loan of Rs. 45.9 lakhs and a generating set is being purchased with a further loan of Rs. 3.5 lakhs. The net profit for the year was Rs. 18.6 lakhs. The annual report of South India viscose for 1973 shows a lower level of output due to the power cut, water shortage and scarcity of raw materials particularly caustic soda (See Vol. IV page 423) Comparatively 1973 production of rayon yarn was 2,338 tonnes against 3,113 tonnes in 1972, staple fibre 2,348 tonnes against 3,204 tonnes and only pulp higher at 24,124 tonnes compared to 1972's 24,092 tonnes. The total turn over fell

from 1,213 lakhs to Rs. 1,111 lakhs. Even so, this is a good record and the expansion of staple fibre to 20 tonnes per day, the establishment of the polynosic staple fibre plant and doubling the paper plant capacity are encouraging.

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IV. Education, Science and Health

Unrest in Educational Institutions:

July saw 3 Vice Chancellors resigning, those of Delhi University, Gauhati University and Patna University, a demand for the resignation of a fourth Vice Chancellor, Lucknow University, by the Lucknow University Teachers Association and the gheraoing of a principal—Kumbakonam. Violence, continuous and widespread throughout the State in all university and higher education centres, continued in Bihar and Assam. In Kerala disturbances continued during the first week of July after which it died down. The more serious event in the month is the quitting of Vice Chancellors which can herald a break down of educational management.

The Paper Famine and Education:

The paper famine has been building in the Country over some years. The secular trend forces include the quantitative explosion of education since independence and the exponential growth in the demand for paper, industrialisation, increased economic activity, and enormous growth of bureaucracy with its phenomenal paper consumption the growing and indiscriminate use of paper as packing material and the mushrooming of journals and magazines. This is the demand side. On the supply side, paper technology has been at a standstill, traditional raw materials have become increasingly scarce and new sources have not been developed and more immediately the power cut and industrial unrest have kept production and supply down. The result has been the shooting up of paper prices—white printing paper was Rs. 2.50 a kg. last year, it is now Rs. 8 per kg. and even at that price is unavailable. Against the official sanctioned price of Rs. 2,500 per tonne, it is selling at Rs. 5,300 per tonne. The most dramatic impact of this paper famine situation has been on the educational institutions which opened in June-July with students having no text books and no note books for their use. The most absurd situation is illustrated by what has happened in UP which is described by the headline, "schooling without books". There was a case for a 50 per cent rise in the price of the new text books because of the increased cost of paper referred to earlier, increased cost of ink (from Rs. 8.20 per kg. to Rs. 22.37 per kg) and increased wages. The State government however invoked DIR powers and ordered the books to be sold at last year's prices and postponed the reopening of schools and colleges from July 8 to August 1. The publishers challenged the government orders in the High court, won their case, and soon after the government ordered reopening of colleges on July 29. But the

text books cannot be printed for at least two more months and their prices will certainly be above the original 50 per cent rise that the trade had agreed to. In Madras, a Federation of Note Book Manufacturers Association was formed and met in July and established a code of conduct under which each has pledged that the note books made out of paper obtained at the concessional rate of Rs. 2,750 per tonne from the government will be sold to the students at retail prices fixed by the Federation. Further each note book will carry its retail price, the number of pages, the manufacture's name and the Federation emblem. This is a good move, but whether it will hold depends on the availability of paper. The Development Council for paper allocated 50,000 tonnes for text books and note books for this region, but in the first six months only 8,000 tonnes have been received. Again, the Union government has instructed paper mills to supply 2 lakh tonnes of paper for production of note books and text books, has set up a National Committee to look into production and make quarterly allocations and Regional Committee to do the distribution. The Southern Regional Committee is to be formed. Meanwhile if the 2 lakh tonnes reaches the South, only 60,000 tonnes is allotted to note books, whereas the students' needs amount to 1.1 lakh tonnes. The rest is for text books, which will certainly not be available until the end of the first term. Meanwhile there are short term remedies—greater use of slates, book banks, libraries and this should be fully used. The paper famine and its effect is hitting the poor student hard and is adding to the crisis of education system.

Educational reform:

Educational reform developments along four lines at the school level were reported in July. First quantitative expansion and qualitative improvements in science education are taking place. In this State in addition to the existing 14 mobile science vans, 13 more are being acquired, so that by next year each of the 47 educational districts will have one van. The van with a science graduate teacher contains Rs. 10,000 of equipment for experiments in core science and elective physics and chemistry in the Higher standards—9, 10 and 11, each van covering daily two village high schools which have no science equipment. For the majority of our 2,800 high schools, this is the only liaison that students have with science. On the quality side, the Tata Institute of Fundamental Research, the Maharashtra government and the municipal corporation of Bombay have formed the Homi Bhabha Centre of Science Education which has developed new curriculam material based on the "discovery approach". This programme with its kits of apparatus and text books is being used in standards 5, 6 and 7 in 10 schools on the basis of successful tests based on student performance and behaviour. In Madras, a high school run by Binny's is providing out of school vocational experience for students in the ninth and tenth classes. Here the curriculam continues to be the normal prescribed one, but after school at 4 p.m., the students in the top 2 classes form into batches and work at theory and practice on radio engineering—use of components, mounting of spares, soldering, wiring, drilling, threading etc. Similar courses in embroidery and sewing for girl students are being started. This is an interesting mix of leaving the school course as it is and providing manual skills additionally. Third the State is also moving slowly along lines of examination reform. The questions in the examination are being changed form the usual essay type, memory testing to short multiple questions. Second a continuous evalution of the non academic side of the student—

his personal and social qualities, literary, scientific, cultural and outdoor activities are evaluated through agreed tools and techniques. But already the system faces second generation problems, centering around the burden on some of the over worked teachers having to keep detailed records of each student's progress and the absence of libraries and sports fields in many schools. However where the system is working, it has improved the student's learning abilities and his sports, literary and handwriting abilities. Fourth in view of the start of TV in the State in April 1975, the training of programmes and teachers for use of educational TV is being developed by the government. At the University level, the UGC conference for Southern universities and colleges in Madurai at the end of July attended by 4 vice-chancellors and 6 college principals, professors and students recommended the setting up of autonomous colleges in the South, giving preference to colleges in the districts, covering both under-graduate and post graduate colleges and affording such colleges freedom to innovate the curriculum and the examination system. The State is now set for beginning the move for autonomous colleges in the State. Due to acute water shortage, Annamalai university postponed its reopening and is using the respite for improved teaching and research, it is hoped. In this State also the general trend of fall in admissions (See last issue Vol. IV page 502) is becoming evident. Firm figures should be available in time for the next issue. As of July the evidence is that only for B. Com is there a problem of admission. A curious event is the decision of the Bombay University in mid July declaring as passed all the 724 students who had failed in the first year science examination because of "the irrational nature of the Physics question paper". This question of rationality or purpose should however be raised for all our question papers. The Union government introduced in the Lok Sabha The Central University, Hyderabad, Bill to provide higher education facilities for all Andhras. This new university will be wholly financed by UGC and calls for Rs. 11.60 crores non-recurring expenditure over 10 years and Rs. 3.04 crores recurring during the Fifth Plan. This institution is not really needed, as expansion of higher education is not the problem facing the Country. It is however a political necessity.

Technical edueation:

The Regional Engineering College, Tiruchi has done very well in its engineering training programmes in the chemical, electronics and communication, mechaical and metallurgical branches. 160 of its 164 final year B.E. and B. Tech. students graduated, 124 of them in the first class. Further the Institute of Child Care in Madras ran in co-operation with WHO a 5 week inter-country training programme on care of the new born at which team work by doctors, and nurses in the practical aspects of neo-natal pediatrics was the major theme. For the Asian countries, the success of the population control policy depends on the care and survival of the new born. Medical college admissions in Karnataka referred to in Vol. IV page 449 have been limited to 75 in the 9 colleges which are under the de-recognition threat. This drastic reduction of total admissions to 700 (not 850 as earlier reported) will affect the State's and Country's supply of doctors for the Sixth Plan. The improvement of facilities in these colleges is therefore urgent.

Science:

CSIR is assisting Kerala in strengthening and developing its research facilities. Taking over the Industrial Testing Laboratory, the units of the Central Food Technological Research Institute, and Central

Glass Ceramic Research Institution CSIR is establishing units of other National laboratories in the State, starting with a MERADO unit in Cochin. This is part of the CSIR programme of involving itself more actively in States development programmes (See Vol. III, pages 429-430, 726-727).

Health :

The Voluntary Health Service in the State referred to in Vol. I No. 10 pages 20-21 and Vol. II No. 1 page 42 of the Bulletin has now completed 10 years. It has 36,140 subscribers to its medical aid plan, has treated 3 lakh patients and has a modern general hospital to which a new eye block was added in July. Its mini-centre project in St. Thomas Mount covers 8,631 families out of a total of 15,209 families and excellent preventive care service on a permanent basis could be expanded if the village leaders will be more involved in this essential service to their people. Further to the disturbing problem of the revival of malaria in the Country referred to in the last issue (Vol. IV page 504), its incidence in the State and the South generally is a cause for concern. In Tamil Nadu the incidence of malaria has risen from 1,596 cases in 1964 to 4,440 in 1973, in Karnataka from 768 to 72,000 and in Kerala from 27 to 689. The major problem to contend with is the complacency of the people, the downgrading of preventive care and increase of dirt and neglect of the sewerage system. These can and must be remedied. There is also the increased vector resistance to DDT noticed in this State which can be dealt with the new techniques now available and through adequate provision of staff for this urgent programme. The recently constituted Family Planning Communication Board at its first meeting in July in Delhi discussed how the Planning Movement can become a people's movement, and how the various ministries—Information and Broadcasting, Health, Planning, Education, Community Development and Social Welfare can act jointly in view of reduced resources to bring the message in simple practical terms to the people, The field workers who are being trained as multi purpose workers (See last issue Vol. IV page 505) will have the responsibility of training all health and nutrition workers in this co-ordinated approach. The production programme for condoms is being expanded from 77 million pieces per annum by the Kerala unit, by a similar amount by 2 units being set up in West Bengal and Kashmir. This effort must be underpinned by the communication programme.

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V. Employment

Under the IOB self employment scheme being promoted by the small Business Aid Agency of the Bank, (See Vol. III page 812), 300 persons have been assisted up'o December 1973. In July credit facilities to 20 unemployed were granted by the Agency for the unemployed to set up as hawkers, book publishers and retail traders. Also in July, IOC as part of its employment programme for unemployed graduates and engineers, helped set up 4 unemployed scheduled castes young men

as IOC dealers. This reservation approach is gathering momentum with the State government's decision to reserve 80 per cent of public and private sector jobs to local people—those who have resided in the State for 15 years or more. It has also directed that 18 per cent of district judges' posts should be reserved for scheduled castes and 31 per cent for backward classes. These reservations are intended to correct past injustices and in the case of scheduled castes are essential. For the others, such reservations do not increase the total number of employment opportunities which is the priority. The profile of unemployed post graduate scientists is set forth in the May issue of CSIR's Bulletin, Technical Manpower, using the 2,108 post graduate scientists on the Delhi live registers of the Employment Exchange as at December 1972. (a) On the period of unemployment, one third are on the registers for more than 1 year and a further one third for 6 months to 1 year. The average period of stay on the live registers is 11.7 months and the average period after passing their M.Sc. is 24.3 months, which is more significant. 38 per cent of them had obtained their M.Sc before 1970. (b) On the examination performance of the unemployed, 30 per cent were first divisioners, 60 per cent second divisioners and only 10 per cent third divisioners. Educational excellence as measured by performance in examinations does not help with employment, (c) the age composition shows that about 95 per cent are in the age group 22-30 (37.5 per cent in age 22-24, 25 per cent in the age 24-26 and 16 per cent in 26-30 years). (d) The subject wise distribution shows that all science subjects are equally subject to unemployment and for the same period of unemployment, (of the unemployed 29 per cent were chemistry M.Scs, 27.5 per cent in physics, 23.5 per cent in mathematics and 18 per cent in bio-sciences, with the waiting period ranging from 11.7 months for chemistry to 9.1 months for bio-sciences), (e) The period of stay on the registers seems to vary inversely with the salary demanded. Those who demanded Rs. 300/400 per month waited 10.7 months, those demanding Rs. 400/500 waited 8.5 months and those demanding above Rs 500 per month waited 6.7 months. On the other hand, those demanding Rs. 200-300 waited 13.2 months. This profile needs to be pondered over by the university authorities in their programme of science re-orientation.

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VI. Other Items

Indian Economic Association:

The Honorary General Secretary of the Indian Economic Association has left for Europe to attend the fourth Triennial Council of the Association and the Fourth World Congress of Economists at Budapest, Hungary from August 17-24. The following economists have indicated their acceptance of the invitation to participate in the seminar on Improved teaching of Economics in addition to those listed in Vol. IV page 453—Dr. A. S. Minocha (Hamadiya College, Bhopal), Prof. A. N. Ozal (St. Xavier's College, Bombay), Dr. M. J. Jussawala (Osmannia University), Dr. K. R. Nanekar (Nagpur Univer-

sity), Dr. S. Sarangapani (Gauhati University), Dr. R. Chitre (Jodhpur University), Dr. H. G. Singh (Magadh University), Dr. P. A. Nair (P.S.G. College Coimbatore), Dr. A. Ramaswami (Annamalai University), Prof. M. Sebastian (St. Joseph's College Tiruchi), Mr. P. N. Chopra (Government College, Ludhiana). The Association's programme for 1975 is now under preparation—(a) a symposium on Concepts and Measurements of Rural Unemployment—theoretical issues and empirical studies, to be organised by Dr. K. N. Raj at the Centre of Development Studies, Trivandrum, (b) a seminar on the relation between teaching and research in economics to be organised by Dr. S. N. Sen, Vice-Chancellor, Calcutta University, (c) a publication on the History of Indian Economic Thought by Dr B. N. Ganguli and (d) a programme of visits to the main Economics teaching centres by 2 visiting economists.

CASA :

The Christian Agency for Social Action (CASA) which has been engaged in relief and food distribution activities on behalf of donors from Europe and North America, undertook in a re-appraisal of its nature and functions at a meeting in Madras in early July. It decided that its primary task should be to assist in the development of rural areas and peoples within the frame-work of the Five Year Plan and that it would cease being primarily a food distributing agency, both because it was not competent in this field and because of the involvement of foreign bodies in its operation. Further the support of the local people needs to be mobilised for its activities, as without such support it ceases to be a native plant and is engaged in good works from above.

College of Education :

The Stells Matutina college of education opened its academic year with a study of the role of the teacher in the process of social change. In this connection there was an examination of the three main changes that are underway in the country—from poverty to sufficiency, from illiteracy to learning, form falling moral standards to a society of integrity. It was noted that these were aspirations rather than actual movements and it was the role of the teacher to help operationalise these goals.

State Planning Commission and MIDS :

Two meetings of some members of the State Planning Commission and the Institute were held in July in the seminar room of the Institute. At the first meeting, John Lewis, economist from Princeton was present and discussions ranged around implementing the State Plan through District Planning cells, the problems of the power deficit, the current hyper inflation, black money and SEMIBOMBLA and the programme of the Indian Economic Association. At the second meeting with the representative of the National Committee on Science and Technology present, there was a review of the National Plan and the State Plan for Science and Technology. It was agreed that the most urgent next step was for the State Planning Commission to recommend to the government the setting up of the machinery for implementing the Plan set forth in the State Plan for Science and Technology and to activate the interim committee established under the chairmanship of the Director of IIT, Madras.

Institute of Public Undertakings :

A second meeting of the Institute of Public Undertakings (Madras chapter) reviewed the results of the survey of public understakings with regard to capacity utilisation and industrial relations and the analysis of the replies to the questionnaire made by MIDS on the first subject and the

Centre of Social Studies on the second study (See Vol. IV page 156). It noted with regret that very few undertakings had filled the questionnaire on problems of capacity utilisation and decided to invite the assistance of the Union minister of heavy industries in getting the information needed. It decided to organise early in September a first seminar to discuss the industrial relations of the undertakings and use the occasion also for a first discussion of the problems of capacity utilisation, on which they would be requested to send further and fuller information to MIDS, on the basis of the first analysis by MIDS.

Andhra Mahila Sabha:

The third meeting of the Steering Committee of the Andhra Mahila Sabha meeting in July reviewed the programme and budget for 1974-75 and decided to intensify the efforts of the family planning programme of the services rendered by the special ward. It accepted the request of the Director of Health Service, who commended the family planning programme of the centre to undertake an evaluation of the contraceptives and sterilisations record of the centre in light of the questionnaire that he would send the Sabha. It decided to review the staff structure of the nursing home and estaolish a 3 year building programme for fund raising purposes.

NCERT:

The National Council of Education, Research and Training established a committee on educational research and innovation whose first meeting in July in New Delhi reviewed the state of educational innovation and research in the Country. It defined its task as the promotion of socially and scientifically relevant research in education in light of the educational and national crisis facing the Country. The main areas of concentration should be structures, curriculam and teaching and learning methods where research should have a pay off. In light of this it reviewed the research programmes of the departments of the Council and arranged them in an order of priority.

Indian National Commission for UNESCO:

There were 2 meetings of the Steering Committee of Indian National Commission for UNESCO in July in New Delhi where UNESCO's draft programme and budget for 1975-76 and the Medium Term Plan (1977-82) were reviewed and draft amendments to the document decided on and forwarded to UNESCO. In general, it was noted that there was a large expansion of staff proposed and over 250 meetings planned for biennium. It was proposed to reduce both items by 10 to 15 per cent and use the savings to finance field programmes. It was also noted that Asia and India did not figure in the programme to the extent that other regions did. The major proposals made were the reinstatement of the Advisory Committee on out-of-school education, the increased funding of the Asian programme for educational innovations, the follow up of CASTASIA, increased co-operation with international Institute of Tamil Studies, the inclusion of Ajanta in the international campaigns to preserve cultural monuments, the strengthening of central Asian and inter Asian cultural programmes and a more rational distribution of the world supply of newsprint and paper as well as their increased production On the Medium Term Plan, it was suggested that the proposals should conform to the past decision of the General Conference and not be so abstract. Some of the assumptions about educational infrastructures were open to question and a more definite indication to decentralise the structure to the field and national commissions should be made.

August Development Seminar:

The paper for the August Development Seminar, 'Agriculture in the Fifth Plan by Dr. P. V. Rajkumar, Additional Professor of Economics, Presidency College, Madras, together with a summary of discussion of the paper at the seminar on Thursday, July 25, in the seminar room of the Institute, under the chairmanship of Rev. Fr. Devasia, Prof. & Head of Dept. of Economics, Loyola College, Madras appears as the first article.

Second Article:

A paper on Investment and Industrial Growth appears as the second article in this issue.

AGRICULTURE IN TAMIL NADU'S FIFTH FIVE YEAR PLAN

By

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Tamil Nadu's Fifth Plan :

Tamil Nadu's Fifth Five Year Plan originally envisaged an outlay of Rs. 1,500 crores which has now been pruned by the Planning Commission to Rs. 1,100 crores. The State is however, determined to implement a plan of the size of Rs 1,214 crores. The approach to Tamil Nadu's Fifth Five Year Plan covering the period 1974-1979 is a part of the long term perspective plan for the 12 year period ending 1984.

Perspective Agricultural Plan of Green Revolution :

A Rs. 900 crore perspective agricultural plan for the State covering a 12 year period has been prepared by the task force of the State Planning Commission. The task force report on agriculture comprising two volumes bears the impressive caption "Towards a Greener Revolution". This title is indeed provocative in as much as it assumes culmination of Green Revolution in Tamil Nadu on the eve of State's Fifth Plan which is highly debatable while Andhra Pradesh may lay no claim to green revolution while Uttar Pradesh may be experiencing incipient green revolution, while Punjab and Haryana are acclaimed as land of green revolution, Tamil Nadu may only be said to have had rapid agricultural growth but no green revolution.

The expression green revolution signifies in operational terms substantial changes in the input structure of the production function resulting in drastic changes in the output structure. In simple terms green revolution envisages a revolutionary increase in agricultural growth rate. For example, in Punjab the classic home of green revolution agricultural production between 1950-51 and 1970-71 increased at an annual compound rate of 6.5 per cent against only 3.3 per cent for the country as a whole. Between 1964-65 and 1970-71 the food grains production in punjab increased at a remarkable rate of 10.6 per cent against the national average of 3.2 per cent. Punjab which has begun its post-partition existence with an annual deficit of 35,000 tonnes of food grains 25 years ago, has today a surplus of 35 lakh tonnes of wheat alone. The State has emerged as a major granary of India.

In Tamil Nadu during 1952-53 and 1969-70 the agricultural growth rate has been only 4.2 per cent. In respect of food grains, output went up from 57 lakh tonnes to 70 lakh tonnes. In other words it increased at an annual rate of only 3 per cent as compared to 2.2 per cent for the whole country so to deserve the claim of "green revolution" output response to increased inputs should be something revolutionary. Conservatives hold that in operational terms revolutio-

nary output growth may at least be of the order of 5 per cent.

Agricultural in Fourth Plan:

Agriculture, the predominant sector of the State's economy provides support to 73.37 per cent of the rural population and happens to be the largest single source of State income. Therefore, special attention continues to be given in the Fifth Plan for further agricultural development. Production in the Agricultural Sector increased significantly during the Fourth Plan Period. From 1967-68 to 1971-72 the high yielding varieties programme coverage under paddy increased from 4.85 lakh hectares to 22.43 lakh hectares. The consumption of nitrogen fertilisers during the same period rose from 0.96 lakh tonnes to 2.14 lakh tonnes of nitrogen. During 1972-73 the I.R. varieties covered an area of 12.61 lakh hectares and other high yielding varieties covered an area of 9.56 lakh hectares making a total of 22.17 lakh hectares out of a total of 26.40 lakh hectares. The average per hectare yield of rice in the State went up steadily from 1,052 Kg. to 2,030 Kg. in the same period. By the end of 1973-74 rice production in Tamil Nadu is expected to touch 57 lakh tonnes. Production of millets will be of the order of 15 lakh tonnes and pulses 2.1 lakh tonnes, Cotton production is expected to reach 0.72 lakh tonnes of lint (5 lakh bales), oil seeds 11.50 lakh tonnes and gur 11.00 lakh tonnes making in all 97.32 lakh tonnes of production in the major crops. According to the report an Annual Plan 1974-75 Government of Tamil Nadu the actual production level attained in the important commodities in 1968-69 and the production level anticipated in 1973-74 are abstracted below.

	Actual Production 1968-69 (lakh tonnes)	*Anticipated Production in 1973-74 (lakh tonnes)*
Food grains	50.62	74.10
Cotton (lint)	0.45	0.72
Sugar cane	15.14	11.00
Oil Seeds	8.36	11.50
Total	74.57	97.32

As against a total production of 74.57 lakh tonnes in respect of the major agricultural commodities in 1968-69 the production is as expected to be of the order of 97.32 lakh tonnes in 1973-74, representing a growth of 30 per cent in the Fourth Plan period. It would have been a remarkable feat, considering the acute shortage of fertilisers and some of the popular pesticides felt in the final year of the Fourth Plan, if only the projected target had been achieved.

Economic Appraisal 1973-74:

But according to the latest economic appraisal document of the government of Tamil Nadu presented to the State Assembly on 12th Aug., 1974 the achievement falls considerably short of the target. As regards agriculture, the appraisal says the target for 1973-74 has to be scaled down from the original 79 lakh tonnes and refixed at 73 lakh tonnes because of several problems like inadequate monsoon and shortage of fertilisers. Against the demand for 3.15 lakh tonnes of nitrogen, the supply amounted to only 2.3 lakh tonnes. Pesticides were also in short supply. However commercial crops like sugarcane, cotton and oilseeds gave a better performance.

Agriculture in Fifth Plan:

The Fifth Plan contemplates an outlay of Rs. 30,96 lakhs on agricultural Research, Education and crop husbandry and out of this an outlay of 468.42 lakhs is proposed for 1974-75.

The Fifth plan proposals aim at an over-all increase in production of 24 per cent, with greater increase in respect of crops other than rice. Towards this objective it is proposed to lay more emphasis on the production and distribution of higher quality seeds in respect of almost all crops. Better attention will also be devoted to the timely and adequate supply of inputs such as credit, fertilisers, pesticides and information. Multiple cropping will receive special attention. To exploit the economics of large scale farming it is proposed to set up a State Farms Corporation.

The following are the details of expenditure expected to be incurred during the Fourth Plan, the proposed outlay for the Fifth Plan (1974-75 to 1978-79) and the annual plan (1974-75) under agricultural education and research and crop husbandry.

Agricultural Education and Research and Crop Husbandry

	Group heads	*Fourth Plan Expenditure*	*Outlay Proposed* *Fifth Plan*	*Annual Plan (1974-75)*
			(Rs. in lakhs)	
1.	Agricultural education	1,57.00		
2.	Agricultural Research	80·89		
3.	Improved Seed Production Programme	1,63.21		
4.	Manures and fertilisers	45.12	30,96.00	4,68.42
5.	Improved practices	3,46.73		
6.	Commercial crops	5,26.66		
7.	Extension activities	64.38		
8.	Other additional schemes	4,90.51		
9.	Land Devcl›pment	10,21.41		
	Total	28,95.91		

Source: Annual Plan 1974-75. Narrative notes on programmes, Finance Dept., Government of Tamil Nadu, 1974. P. 2.

Agricultural Education and Research and crop husbandry form one vital portion of the head agricultural and allied Programmes on the State's Fifth Plan programmes. The following table gives the break-up Fifth plan and the annual Plan at a glance.

Government of Tamil Nadu

Fifth Plan and Annual Plan at a glance

Head of Development	*Fifth Plan Provision (tentatiue) 1974-79*	*Annual Plan 1974-75*
(1)	(2)	(3)
Agriculture and Allied programmes	(Rs. in lakhs)	
1. Agricultural Education and Research	5,66	62
2. Crop husbandry	25,30	4,07
3. Minor Irrigation	58,56	7,26
4 Soil conservation	9,12	1,46
5. Command Area Development	85	18
6. Animal husbandry	14,74	90
7. Dairying and Milk supply	3,85	34
8. Fisheries	18,80	1,74
9. Forest	8,00	1,63
10. Cinchona	1,01	14
11. Agricultural credit	15,00	1,70
12. Agricultural Marketing	2,45	10
13. Storage Ware-housing	50	30
Total	1,63,84	20,44

Head of Development	*Fifth Plan Provision (tentative) 1974-75*	*Annual Plan 1974-75*
	(Rs. in lakhs)	
II Co-operation and Community Development	41,36	6,23
III Rural Development and Employment	1,00	50
IV Irrigation and power	3,94,68	53,09
V Industry and Mining	88,58	7,60
VI Transport and Communications	90,18	13,88
VII Social Services	4,23,51	46,84
VIII Miscellaneous	31,20	2,56
Grand Total	12,34,35	1,51,14

Agricultural Education and Research :—

Agricultural development and green revolution are all due to progress in agricultural education and research. So the Fifth Plan has given special attention to agricultural education and research. In September 1971, the Tamil Nadu Agricultural University was established in Coimbatore, to which the existing colleges were affiliated. In addition there are six research centres and 18 research stations for agriculture and allied activities. The Agricultural University is engaged in the development of new strains of paddy, cotton and pulses. In April 1972, the University developed the high yielding variety "Red Gram Co I" with a high yield potential of 1,600 kg. per hectare.

In this context it may not be out of place to draw a parallel with Punjab where the Punjab Agricultural University was established at Ludhiana as early as 1962. It soon established its reputation as a seat of sound agricultural research in the fields of plant breeding agronomy, agricultural engineering and plan protection. The biggest single factor which has promoted the green revolution in Punjab is the use of high-yielding varieties of wheat 'P.V. 18' 'Kalyan Sona 227' and 'S 308'—developed by the university from the material originally received from Mexico. By taking the extension work from the State Government the University has established a new tradition in the country.

A sum of Rs. 566 lakh has been provided in the Fifth Plan for agricultural research and education out of which Rs. 61.77 or 62 lakhs is provided for annual plan 1974-75. Provision is made for the establishment of the following new schemes :-

(I) Establishment of Tropical Fruit Research Institute

(II) Establishment of Co-ordination unit for adaptive Research Programme at Trichy.

(III) Kalaignar Karunanidhi Agricultural Research Institute at Kudimianmalai

(IV) Establishment of Regional Research station at Amba Samudram.

(V) Establishment of Regional Research station at Tirurkuppam.

(VI) Establishment of multi-crop ,research station Pattukottai.

(VII) Improvement of wet land pulses in Tamil Nadu

(VIII) Scheme for Crop substitution studies in Tamil Nadu

(IX) Soil Testing laboratories.

During the last decade there has been no significant change in the overall cropping pattern in the State. No research work on efficient cropping pattern has been taken up so far. With the advent of short duration high yielding varieties in different crops the most economic cropping patterns need to be worked out for the region. So the scheme for crop substitution studies in Tamil Nadu, is a vital step full of potentialities. The Budget estimate for 1974-75 is 0.88 lakhs.

Improved Seed Production Programme :

Seed constitutes one of the most important inputs of any agricultural programme. In Punjab the tremendous success on the food front has been first and foremost due to the supply of good seed. The Punjabi farmer is so aggressively responsive to new ideas that if a new seed is released he will rush to buy it at any price. Instances have been known where farmers have purchased new wheat seeds at the fantastic rate of Rs. 1,400 per Kg. So during the Fifth Plan in Tamil Nadu emphasis is rightly laid on the production and distribution of adequate quantities of certified seeds for cereals. So the improved seeds production programme with budget estimate for 1974-75 of Rs. 69.48 lakh consists of (i) State seed production programme

(ii) Seed Processing units (iii) Seed certification and (iv) Multiplication and Distribution of improved seeds.

Manures and Fertilisers :

Here the object is to provide facilities to the village panchayats to utilise the refuse materials including night soil available in the village for the purpose of composting. A lump sum provision of Rs. 1.00 lakh is made towards the cost of subsidy to be paid to the panchayats. So also token grant is made in the budget for 1974-75 to utilise all the wastes for the production of good quality compost on scientific basis with the help of local bodies.

Improved Practices :

Improved Practices include (i) purchase of plant protection chemicals and equipment with a budget provision of Rs. 16.50 lakhs for 1974-75 (ii) Pesticides testing laboratories with a budget provision Rs. 8.29 lakhs for 1974-75 and (iii) Mobile Service units and crop yields competition with a budget provision of Rs. 2.30 lakhs.

Plant Protection has assumed considerable importance with the introduction of the high-yielding varieties programme, the multiple cropping programme and other programmes with a high plant protection content.

Crop yields competition scheme is to achieve increases in yields of various crops through adoption of improved techniques and use of improved inputs. The number of competitions is to increase from 50, 130 in 1973-74 to 68, 720 in 1974-75.

Extension activities and other additional Schemes :

Intensive Agricultural District Programme, a new concept in tackling food production by making available the scientific know-how and inputs in an intensive manner in chosen area, is in operation in Thanjavur District from 1960. Due to the changes in varieties and stepping up of intensive cultivation the total production in the delta increased substantially. A budget estimate of Rs. 2.00 lakhs is made for 1974-75 under this head.

Intensive Agricultural Area Programme is being at present implemented in the five selected districts of Madurai, Chingleput, Coimbatore, Thirunelveli and Trichy which have relatively larger area under assured irrigation. The main objective of the programme is to intensify the production of cereals, by the application of recommended doses of fertiliser and green manures, use of improved seeds, plant protection methods, cultivation practices etc., Area covered under the programme during the last five years is given below.

		Area in lakh acres
1969-70	... ...	20.12
1970-71	... ...	23.75
1971-72	... ...	27.56
1972-73	... ...	27.59
1973-74	... ...	26.72 (anticipated)

During 1974-75 the Intensive Agricultural Programme will be extended to the non-intensive Agricultural Area Programme districts of South Arcot, North Arcot and Salem. Budget estimate for 1974-75 under this head is Rs. 27 lakhs.

In order to achieve the production level of 59.00 lakh tonnes under paddy 16-00 lakh tonnes by the end of 1974-75 it is proposed to give impetus to the High Yielding Varieties Programme by providing budget estimate for 1974–75 of the order of 4.18 lakhs.

Prospectives of Agricultural Production

Food grains:

Food grains account for half of the total value of the agricultural production in the State. Among food grains paddy predominate followed by Jowar.

The rice yields in Tamil Nadu has been steadily rising. It is expected it would increase to 69 lakh tonnes by the end of the Fifth Plan without any increase in area. Supply of rice is to be increased by intensive cultivation. Similarly millet production is expected to reach the level of 22.55 lakh tonnes in 1978-79. The crash programmes launched recently to bring about rapid increases in pulse production have begun giving encouraging results. From 1.24 lakh tonnes in 1970-71 pulse production has increased to 2.01 lakh tonnes in 1972-73. The production potential of Tamil Nadu is estimated at about 5 lakh tonnes at the end of 1978-79.

The over-all demand and supply position of food grains and pulses together would be 75.23 lakh tonnes and 76.15 lakh tonnes for 1973-74 and 94.13 lakh tonnes and 95.77 lakh tonnes for 1978-79.

Oil seeds:

The irrigated area under oilseeds would be increased from the present 1.51 lakh hectares to 2.70 lakh hectares at the end of the Fifth Plan. The total area under oilseeds would be increased to 15.02 lakh hectares in 1978-79. The increase in irrigated area and extension of the area under oilseeds coupled with improved agronomic practices would result in a production of 17.60 lakh tonnes in 1978-79. This oil production would be able to meet the projected demand.

The oilseeds development scheme is in operation since 1957-58 throughout the State The package scheme was started in 1962-63 to popularise the improved practices. During the Fifth Plan a centrally sponsored Intensive District Programme is proposed for the districts of North Arcot and South Arcot. The remaining parts of the State are to be brought under a package programme. A total net provision of Rs. 42.71 lakhs has been included in the Budget for 1974-75.

Sugarcane:

Tamil Nadu is the third largest sugarcane-growing State after Uttar Pradesh and Maharashtra, accounting for 9 per cent of the total sugarcane grown in the country. The Fourth Five Year Plan objective viz. to step up the area under sugarcane to 1.05 lakh hectares has been exceeded. The area under sugarcane will continue to increase and is estimated to reach 1.65 lakh hectares in 1983-84. During the Fifth and Sixth Plan periods productivity is estimated to increase from 86.49 tonnes of cane per hectare to 99 tonnes. In the Fifth Plan provision is made for sugarcane development scheme. Under this scheme intensive propaganda is being done to educate the ryots in improved methods of cultivation. A total provision of Rs. 102.85 lakhs is provided in the budget for 1974-75.

Critical estimate of agricultural development in the Fifth Plan:—

The target of 5.5 per cent annual compound growth rate in agriculture for Tamil Nadu appears to be over-ambitious particularly in view of the known gap between plans and performance in previous years. Our past experience both at National and State level shows that the realised growth rate in agriculture has consistently fallen much below the targetted rate of growth throughout the last twenty years. The Fifth Plan estimates do not adduce any evidence to show that favourable conditions do exist for the achievement of expected results.

The impact of high yielding varieties of rice on production has not been very

spectacular in Tamil Nadu. HYVs do not cover all the areas under rice over in the Fifth Plan and their application to other crops will not make much headway even in the Fifth Plan.

Intensive agricultural development programmes and HYVs programmes require substantial irrigation facilities. Next only to Punjab, Tamil Nadu is the best irrigated state of India. About 43 per cent of its net sown area is irrigated, which is twice the average for the country as a whole. But the noteworthy fact about the State is that almost all surface water resources have been exploited to the maximum extent. According to the Irrigation Commission Report (1972) the State possesses the ultimate irrigation potential of 3.6 million hectares of which 96 per cent has been almost utilised. There is no substantial scope for further development of irrigation facilities. As for ground water also these are serious limitations. This limits the future expansion of agriculture in the State.

Among the states Tamil Nadu leads in respect of the per capita consumption of electricity for agriculture and irrigation purposes and the number of pumps energised. But with the advent of recent power crisis which is likely to continue in view of the saturation point regarding generation of hydro electric power and high cost of oil and also its scarcity in respect of thermal power generation agricultural operations are likely to receive a set back.

The rise in price of diesel and its scarcity are likely to limit the scope for mechanisation of agriculture in Tamil Nadu. In respect of tractors' use Tamil Nadu occupies the third position after Punjab and Uttar Pradesh.

So with the limited scope for increasing the area under cultivation except through multiple cropping and in the absence of new major irrigation schemes the strategy for increasing agricultural production would have to be a progressive introduction of HYV's increasing use of fertilisers, and employment of modern methods of agriculture. All those are proving difficult and therefore, the growth rate of agricultural production hereafter may be as high as it has been so far.

In conclusion one would like to point out that undue concentration on the mono-culture of rice is a defect in the agricultural policy of the State. For example South is the natural home for sugarcane. Four acres of land are being used in Uttar Pradesh and Bihar to grow cane which can be grown in one acre in the South. So greater attention could have been shown to sugarcane cultivation in the Fifth Plan.

So considering all these factors one would not be far wrong if one were to conclude that even under the Fifth Plan agriculture in Tamil Nadu would be undergoing rapid development and no green revolution as on the lines of Punjab.

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Summary of Discussion

In the discussion of the paper at the Seminar held in the seminar room of the Institute on Thursday 29th August, 1974, under the Chairmanship of Rev. Fr. A. Devasia, Professor and Head of the Department of Economics, Loyola College, the author, in introducing the paper, stated that the Fifth Five Year Plan for Agriculture in Tamil Nadu was in essence part of the 12 year (1972-84) Perspective Plan which had for its basis the Task Force Report on agriculture "Towards a greener revolution". The title, however impressive, is debatable as it tacitly assumes that a Green Revolution has been achieved. A Green Revolution is synonymous with agrarian revolution involving certain substantial changes in the input structure of the production function which results in spectacular changes in output structure. In operational terms this means an agricultural growth rate of 5 per cent plus at least. Against this norm it cannot be claimed that there has been a Green Revolution in macro terms in India. There has, however, been a marked agricultural growth in the States of Tamil Nadu, Andhra Pradesh and Uttar Pradesh. The growth rates in Punjab and Harayana have exceeded the Green Revolution minimum. In Tamil Nadu during 1952-53 and 1969-70 the agricultural growth rate has been 4.2 per cent only against a national average of 3.2 per cent per annum On the other hand between 1964-65 and 1970-71 the foodgrains production in Punjab increased at a remarkable rate of 10.6 per cent. The overall growth rate envisaged in agriculture in Tamil Nadu for the Fifth Five Year Plan is 24 per cent breaking down to an annual rate of 5.5 per cent. In view of our past experiences of shortfalls in achievements of targetted rates of growth, the rate of growth projected in the Fifth Five Year Plan seems unduly optimistic. An analysis of the causes for the massive surplus in food grains achieved in the Punjab highlights certain special factors. First, the impressive qualities of the Punjab peasantry with its capacity for hard work and acceptance of innovations must be acknowledged. Second, the role played by the Punjab Agricultural University in the development of HYV varieties and taking over of extension services have played a significant part from its inception in 1962. The third factor is the properly utilised irrigation Fourth, the large numper of ex-servicemen turned farmers have taken very kindly to mechanisation in agriculture. An important point is the response of wheat to HYV development. Another angle is the difference in the structure of grains and the pattern of comsumption between wheat and rice. The Tamil Nadu pattern of agricultural development has been that HYV varieties of paddy have been limited to a few districts and have not been sustained in some of these districts. The HYV paddy strains are mostly coarse grained and require careful management and special package of practices involving irrigation, fertilisers, and insecticides. Further constraints are that we have reached the saturation point in irrigation potential and mechanisation will be limited by power shortage. Therefore the 5.5 per cent annual growth rate set for the Fifth Five Year Plan is unlikely to be achieved and may not even reach the Fourth Plan levels.

During the discussion it was generally agreed that Green Revolution involves technical breakthrough and structural changes. The latter has not been completely accomplished in Tamil Nadu. In land reforms while legislation has been progressive, implementation has been slack as evidenced by the benami transactions. In irrigation and electrification there does

not seem to be much difference between Punjab/Haryana and Tamil Nadu. An opinion was expressed that while the targets set for agricultural growth in the Fifth Five Year Plan were high, they were not beyond attainment provided certain specific policies were followed. These special requirements were: (1) For the country as a whole there should be an irrigation belt for the Kharif crop to ensure that agriculture is not subject to the vagaries of weather. A water management policy for the country must take into account the fact that floods, droughts and uncertain monsoons are permanent features. (2) Timely evolution of substitutes for fertilisers which are now in short supply. (3) A careful analysis and dialogue on the procurement and distribution systems is an essential requirement. In this analysis the procurement price for food grains and issue price are crucial questions. A fair price to the farmers and for the consumer from the basis for any successful take over of the food grains trade. A concomitant problem is the formation of an efficient distributive system. Another issue was that mechanisation cannot be effectively implemented where holdings are fragmented. Reference was made to the fact that the Green Revolution has benefited the rich farmers and aggravated the inequalities in the rural areas. In the Punjab, however, the benefits of increased production had percolated to the lower deciles. A query was raised whether there was possibility of raising the standard of the human factor in Tamil Nadu. Discussing the redistribution of land, it was pointed out that there was considerable fragmentation of land in Punjab prior to independence. Regarding redistribution of land in Tamil Nadu, particularly to Scheduled Castes and Tribes, it was felt that mere allotment alone, could not raise production. It was generally accepted that just as there was a ceiling on maximum size, there should also be a minimum for holdings to ensure optimum production. Modern technology gave best results on medium sized farms, 3 to 5 acres.

In South Korea, Taiwan and the Philippines, the Green Revolution in paddy cultivation has been achieved in the country as a whole. In India agricultural development has been only in certain parts and that mainly in wheat production. At the threshold of the Fifth Five Year Plan it must be realised that Tamil Nadu has yet to make considerable leeway to reach the Green Revolution levels of production, although it is no longer a food deficit state.

INVESTMENT AND INDUSTRIAL GROWTH *

Short term factors :

The 1973 index of industrial production published by the Union Ministry of Industrial Development records an average of 199.5 compared to the 1972 average of 199.3. This 0.1 per cent difference between the two years means that in 1973 there was no industrial growth. While 1972 recorded a growth of 7.1 per cent, for the Fourth Plan as a whole, the industrial growth was 4.1 per cent against the targetted 8-10 per cent. In Tamil Nadu, the decline in production growth of cement, textiles, edible oils, engineering goods, aluminium, tea is usually traced to the power cut and the short supply of coal and oil energy, to which industrial unrest problems are added. In 1973, the 75 per cent power cut reduced cement production in the State to the point where its surplus status disappeared, and the production not being adequate to meet the State's needs, its distribution was licensed and regulated. This year the production in the seven cement factories came to a near halt, as till February less than half their monthly coal needs of 84,900 tonnes was transported by the railways and after February even this supply dried up. The May railway strike simply added to their losses. The textile industry in the State, as a result of the power cut was able to work only to 20 per cent capacity in 1973 and its loss for the year was computed at Rs. 52 crores.[1] The shortage in edible oils in the State is traced to the declining crop in the West region over the last 4 years, where it was 18.3 lakh tonnes in 1970-71, 15.4 lakh tonnes in 1971-72, 13.49 lakh tonnes in 1972-73 and 12.4 lakh tonnes in 1973-74, together with some speculative trading.[2] The power cut last year also led to reduction in production in several lines in the State– motor vehicles Rs. 27 crores, machinery Rs. 20 crores, Rs. 12 crores in sugar, Rs. 10 crores in electrical machinery, Rs. 10 crores in tanneries and similar heavy production cut backs in industrial estates, in tea plantations and the Arkonam Concast plant. These immediate factors retarding industrial growth are also emphasised by the Annual report of the Ministry of industrial Development for 1973-74 which refers to the power shortage, the lack of coal, pig iron and cement and the steep rise in the prices of imported raw materials as the major factors operating in the process of industrial deceleration. Further the hopes of a better industrial performance in 1974 are highlighted by reference to the statistics on industrial licenses and letters of intent. Reference is made to the sharp rise in the industrial licenses which were issued—221 in 1969, 363 in 1970, 626 in 1971 and 596 each year in 1972 and 1973. So too the letters of intent increased from 331 in 1969 to 438 in 1970, to 1015 in 1971, 677 in 1972 and 889 in 1973. But this increase was in part due to simplification and rationalisation of procedures announced in October 1973 which set up the Project Approval Board

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* Extracts from a paper by Dr. Malcolm S. Adiseshiah published in The Silver Jubilee Publication of The Tamil Nadu Industrial Corporation Limited, Madras, dated September 1, 1974

1. Bulletin Vol. III Madras Institute of Development Studies Pages 230-231
   Vol. IV page 435
   Vol. III. page 784

2 Ibid

(PAB) and the Secretariat for Industrial Approvals (SIA).[3] What the Annual report is silent on are the reasons for industrial stagnation which would have been brought to light if the causes for the non-implementation of the approved licenses and letters of intent and the growing under utilisation of industrial capacity had been carefully examined.

Long term factors :

The major reason for the declining secular trend in industrial growth—taking just the Fourth Plan – must be sought in long term forces. The Fourth Plan record of Industrial growth was 6.8 per cent in 1969–70, 3.3 per cent in 1970-71, 4.5 per cent in 1971-72, 5 per cent in 1972-73 and 0.1 per cent in 1973-74.[4] The long term factor which has been operating to produce this secular trend in declining and/or stagnant growth in Industrial production is declining and/or stagnant industrial investments. This serious factor is hidden by the statistics produced with regard to licenses and letters of intent issued, that have been referred to earlier. It is also lost in the impressive record of credit extended by IDBI, ICF, ICICI and the Scheduled Banks to industry. Taking for instance, TIIC, it reports that on 31st March 1974 it had sanctioned gross assistance to industries in Tamil Nadu of Rs. 87.79 crores, with Rs. 54.92 crores disbursed and Rs. 31.16 crores outstanding.[5] In a subsequent communication, the Corporation reports that as of 30th June 1974 its cumulative gross financial assistance sanctioned was Rs. 93 crores to 710 concerns, with disbursals at Rs. 57 crores and outstandings Rs. 33 crores. This is a good record for the State Corporation. The latest (July 15)[6] RBI Weekly supplement reports that on June 28 the total bank credit to the commercial sector amounted to Rs. 9,675 crores, of which the scheduled banks' share was Rs. 7,733 crores, representing 72.71 per cent as the credit-deposits ratio. But the real test of the investment trend in the private sector is to analyse its earnings retained and ploughed back as capital. The Reserve Bank studies of the private and public sector record in this matter is revealing. Taking the four studies on the private sector, the profits after tax of 1,121 small private companies (Rs. 1 to 5 lakhs) are recorded to fall from 2 per cent of net worth in 1969-70 to 0.9 per cent in 1970-71 [7], and that of 350 large public limited companies (Rs. 1 crore and above) decline from—3.4 per cent in 1970-71 to —5.6 per cent in 1971-72 [8]. The Study of 701 selected private limited companies show a decline in profits after tax as percentage of net worth from 9.5 in 1965-66 to 6.2 in 1968-69 and 7.3 in 1969-70 [9], and the later study of 1,501 public limited companies showing a range from 8.9 to 10.1 [10]. The study of 1,001 medium and large private limited companies shows a decline of profits after tax as percentage of net worth from 6.9 in 1970-71 to 6.8 in 1971-72 [11], while in the case of 350 large public limited companies the decline was from 12.2 in 1970-71 to 11 in 1971-72 and 9.7 in 1972-73 [12]. What these detailed studies show is that over the Fourth Plan

3. Ibid
4. Draft Fifth Plan Vol. I pages 9 and 26.
5. TIIC – Silver Jubilee 1949-74 page 7
6. Weekly Statistical Supplement to RBI Bulletin Vol. 25 No. 28 page 2.
7. RBI Bulletin February 1974 page 265.
8. Ibid., page 273.
9. RBI Bulletin April 1974 page 678.
10. RBI Bulletin September 1972 page 1426.
11. RBI Bulletin April 1974 page 678.
12. RBI Bulletin Fabruary 1974 page 273.

Period as a whole, retained earnings in the private and public limited companies declined by around 40 per cent.

Capital issues of the Private Sector:

A similiar declining trend is noticed in regard to the capital raised by the private corporate sector. In 1970 the capital issues amounted to Rs. 66.4 crores, which fell sharply to Rs. 43.37 crores in 1971, rose to Rs. 92.86 crores in 1972 [13] and declined to Rs. 70 crores in 1973. In 1972 when there was an increase, it was entirely through prospectus issues for that year. Rights issues for the year declined by Rs. 1.4 crores. In light of the rise in prices that took place over the Fourth Plan from 175.7 in April 1969 to 283.8 in March 1974 (base year being 1961-62) [14], involving a rise of 24 per cent in the last year, the general conclusion seems to suggest itself that in real terms investment in the private sector during the Plan period was nil or almost nil.

Investment in Public sector:

The stagnation of investment in the public sector during the Fourth Plan period is even more glaring. Here again the two studies of the growth and working of selected operating Central and State Governments companies by the Reserve Bank records the facts. The first study [15] reports that the 12 giant companies of the Central government had a minus record on retained profits of Rs.—25.54 crores in 1969-70 and Rs.—24.4 crores in 1970-71, and the 93 other Central government companies Rs.—10.87 crores and Rs.—72.67 in those 2 years. In the second study [16], 64 Central government companies are reported to have an increased negative retention figure at Rs. 34.98 crores in 1970-71 and Rs.—43.87 crores in 1971-72, and similarly the States governments companies record Rs.—10.95 crores and R—s.6.6 crores for the 2 years. An examination of tables of production set forth in those reports shows an actual decline in key investment goods such as steel, chemicals, aluminium, mining and shortfalls in copper, lead and zinc. The public sector units are the major suppliers of machinery and equipment to the private sector, so that stagnation or decline in the former has a multiplier effect on private sector investment. In this sense public sector investment is a major determinant of the investment trend in the Country. 30 per cent of GNP at current prices, amounting to Rs. 14,000 crores, constitute the total budgetary resources of the Central and State governments. 70 per cent of the domestic savings of the Country are appropriated by the Central and State governments—amounting to Rs. 3,500 crores every year. But the Central government's development expenditure as a percentage of its total expenditure has steadily declined from 60 per cent at the end of the Third Plan to 51 per cent in 1972-73 and to 46 per cent at the end of the Fourth Plan [17]. Further the revised estimate of capital formation in its total expenditure for 1973-74 is estimated at 33 per cent compared to 48 per cent at the end of the Third Plan [18]. Again the Rs. 400 crores economy in 1973-74 was achieved by cutting back on Plan expenditures from Rs. 4,364 crores to Rs. 3,900 crores. Thus the anti-growth force which is in operation is the con-

13. RBI Bulletin November 1973 page 1841.
14. RBI Bulletin April 1974 page 812.
15. RBI Bulletin November 1972 pages 1916 & 1917.
16. RBI Bulletin December 1972 pages 2051 and 2061.
17. Draft Fifth Plan pages 46-52
18. Ibid

tinuous increase in non-plan non development consumption expenditure. The Reserve Bank's analysis for the inflationary upsurge that is underway deals with all factors except the stagnation in investment. It rightly refers to (i) the successive declines in output of foodgrains in 1971-72 and 1972-73 and the consequent lower market arrivals in 1973-74, (ii) widespread hoarding of stocks in anticipation of higher prices, (iii) the uncertainties regarding supplies of imported crude oil and the sharp hike in the prices of petroleum products announced by the government, (iv) the upward revision in procurement prices of foodgrains and the consequent increase in issue prices in November 1973 and (v) upward revision in several of the administered prices such as those of steel, cement etc"[19]. These factors however do not explain the secular trend of price behaviour or industrial non-growth.

Towards industrial revival :

For a revival of industrial production and its growth trend, there must be an increase in investment in the major capital and intermediate goods sector to which an increased rate of investment in the public sector is the key. Immediately it is estimated that agriculture, power, steel, fertilisers and transport need an additional Rs. 400 crores over what is provided in the annual plan for this first year of the Fifth Plan. This can be found, not by cutting back on Plan expenditures in the social service sector as is being done, but by cutting back on non-development expenditure in both the Centre and the States by not more than 3-5 per cent of such expenditure. Another short term investment programme is to attract private investment and private sector activities into industries where serious shortages are faced, such as cement, paper, fertilisers, and even transport and power. In Tamil Nadu and Uttar Pradesh for instance a consortium of private sector firms have proposed setting up thermal plants to generate over 1,000 MW in the two States. This initiative should be speedily approved. But both the spectacular increase in industrial licenses noted earlier and the play of unaccounted money which is modestly estimated at around Rs. 10,000 crores[20] are chanelling such private sector investment, as there is, and a good deal of private corporate production, in the production of non-essentials. One effect of the recent ordinance on dividend limitation will be on similar lines. Parallel to the incentives offered by the government, TIIC and other financial corporations to establish industries in the backward areas, there is need to offer incentives and inducements to the private sector to invest in the areas of serious shortages of essential goods. Further the States can increase their investment resources through improved operations of departmental undertakings and State run enterprises. For all the States, the accounts of industries run by them showed for 1970-71 an excess of working expenses plus interest charges over receipts, of Rs. 2.58 crores for 1971-72 -Rs 1.09 crores, and for 1972-73 -Rs. 1.51 crores[21]. This continuing deficit in investment must be corrected because for some of them like Tamil Nadu, tax receipts, except for taxation of agriculture, have reached their ceiling. Tamil Nadu mobilises the highest resources of all States including the wealthier ones like Maharashtra and larger ones like UP, in State excise (Rs. 35.49 crores), stamps

19. RBI Bulletin April 1964 pages 627-628
20. Bulletin Vol. IV page 471 Madras Institute of Development Studies.
21. RBI Bulletin September 1972 page 13-4

and registration (Rs. 19.54 crores), Motor Vehicles tax (Rs. 19.53 crores) and is second to Maharashtra in Sales tax (Rs. 104.9 crores). It is only in land revenue that it lags (Rs. 3.66 crores)[22]. The time has now come to call a halt to continuous increases in non development expenditures and in non-industrial, non-agricultural development expenditures, mobilise resources from the agricultural sector and make the State industries earn and retain their profits for increased industrial investment. Above all to reverse the secular stagnation trend, there is need for a long term industrial development perspective. Here the Draft Fifth Plan section on industrial growth can be taken as the perspective for the Fifth and the Sixth Plans. The immediate tasks—capacity production, completing existing projects, expansions to existing units and advance action in long gestation projects—calling for an investment of Rs. 2,812 crores to complete spill over projects and Rs. 4,217 for new projects including advance action investments, are feasible. The other important perspective is the goal that two thirds of the domestic savings will be generated by the private sector—the private corporate sector, co-operatives and households. The counter point to this is the savings projected for the government and public sector undertakings which is the other third[23]. These perspectives must now be operationalised and they can be, if the Country is to get back on to the path of self sustained industrial growth. In this the financial institutions in the States and the Country have a key role.

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22. Ibid page 1342
23. Draft Fifth Plan page 49.

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